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JPRS Report

Central Eurasia

Military Affairs

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Central Eurasia

Military Affairs

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CONTENTS

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CIS/RUSSIAN MILITARY ISSUES

ARMED FORCES

- More on Ebert Poll of Military Personnel [ARGUMENTY I FAKTY Oct] 1

POLICY

- Debating Necessity of Mobile Forces [KOMMERSANT-DAILY 8 Oct] 1
 OGONEK Interview With Lebed [AKTSENT 22 Oct] 2
 Grachev Touts Military-Patriotic Education [KRASNAYA ZVEZDA 20 Oct] 7
 New Finance Ministry Taxation Policy on Servicemen [KRASNAYA ZVEZDA 6 Oct] 10
 Statute on Social Protection for Baykonur Personnel [KRASNAYA ZVEZDA 7 Oct] 12

GROUND TROOPS

- Pskov Ammunition Depot Explosion [SEGODNYA 25 Oct] 13

AIR, AIR DEFENSE FORCES

- Russian AWACS Aircraft Profiled [SKRZYDLATA POLSKA Aug] 14
 Technical Specifications of the Su-30MK [KRASNAYA ZVEZDA 22 Oct] 19
 Be-12 Converted to Fight Forest Fires [KRASNAYA ZVEZDA 22 Oct] 20

NAVAL FORCES

- Pacific Fleet Commander Khmelnov Interviewed [KRASNAYA ZVEZDA 21 Oct] 21
 Impact of Cutbacks on Shipbuilding, Naval Support Activities [KRASNAYA ZVEZDA 7 Oct] 22

REAR SERVICES, SUPPORT ISSUES

- Col-Gen Klemin on Importance of Military Transport System [KRASNAYA ZVEZDA 18 Oct] 24
 Lt-Gen Sharlapov Reviews State of Signal Troops [NEZAVISIMAYA GAZETA 21 Oct] 26
 Capabilities, Specifications of An-70 Cargo Aircraft [KRYLYA RODINY Aug] 28
 Deputy Commander on Housing Construction in N Caucasus MD
 [KRASNAYA ZVEZDA 19 Oct] 31

COMMONWEALTH OF INDEPENDENT STATES

- Lt-Gen Ivashov on Prospects for CIS Armed Forces Integration
 [NEZAVISIMAYA GAZETA 18 Oct] 33

STATE AND LOCAL MILITARY FORCES

INTERREGIONAL ISSUES

- Text of Russian-Estonian Troop Withdrawal Treaty [DIPLOMATICHESKIY VESTNIK Aug] 39
 Estonia Said To Renege on Russian Army Retirees' Pact [PRAVDA 19 Oct] 43

UKRAINE

- Shmarov SUPSOV Address on Military Issues [URYADOVYY KURYER 8 Oct] 44
 Shmarov Comments on Civilian Leadership, 'START,' Russian Bases
 [NARODNA ARMIYA 13 Oct] 46

CENTRAL ASIAN STATES

Kazakh Edict Creates Defense Industry Committee	[SOVETY KAZAKHSTANA 14 Oct]	52
---	-----------------------------	----

GENERAL ISSUES

ARMS TRADE

Modernizing Older Arms Said Wave of Future	[KOMMERSANT-DAILY 15 Oct]	54
Illegal Arms Market Scope, Prices	[NOVAYA YEZHEDNEVNAYA GAZETA 21 Oct]	55
Participation in Piraeus Arms Fair Analyzed	[KRASNAYA ZVEZDA 22 Oct]	56

DEFENSE INDUSTRY

Defense Industry Restructuring Proposals Presented	[NEZAVISIMAYA GAZETA 25 Oct]	58
Industry Leaders on State, Future of Defense Sector	[SEGODNYA 18 Oct]	60
Institute Head Outlines Shipbuilding Sector Woes	[NEZAVISIMAYA GAZETA 13 Oct]	66
Zaporozhye Aviation Plant Director Interviewed	[GRAZHDANSKAYA AVIATSIYA Oct]	67
Radiation Pollution From Tomsk Plant	[ROSSIYA 19-25 Oct]	69
Miss Rocketry Center's Work Discussed	[ROSSIYSKAYA GAZETA 27 Oct]	71

SECURITY SERVICES

Coast Guard Commander on Anti-Poaching Action in Far East	[ROSSIYA 19-25 Oct]	73
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ARMED FORCES

More on Ebert Poll of Military Personnel

954K0224A Moscow ARGUMENTY I FAKTY
in Russian No 43, Oct 94 p 2

[Unattributed report: "Whom Do the Officers Trust?"]

[FBIS Translated Text] It is somehow not customary to poll officers in our country. The military, we believe, should carry out an order, not discuss it. Our Russian tradition has been broken by the Germans—representatives of the Moscow branch of the German F. Ebert Foundation, who conducted an anonymous poll of 615 officers of the Russian Army in various military districts.

According to this poll, in circles of the top officers of the Russian Army Boris Yeltsin is no longer a president of whose policy they approve. The responses to the question: "Do you agree with the way in which Boris Yeltsin is handling his duties as president of Russia?" were as follows:

No.....59 percent

Yes.....17 percent

Don't know, did not want to answer.....24 percent.

Boris Yeltsin enjoys the greatest support currently in the missile units; there is a particularly negative opinion of him in the air force and the navy.

The following politicians and military figures were appraised negatively by the officers even more often than Yeltsin:

Gorbachev—by 79 percent—Zhirinovskiy—69 percent—Khasbulatov—64 percent—Burbulis—64 percent—Volkogonov—63 percent—Gaydar—60 percent—Anpilov—59 percent—Sobchak—58 percent—Makashov—56 percent—Shumeyko—54 percent. Yelena Bonner—53 percent—and Grachev—52 percent—are rejected the same as Boris Yeltsin.

The majority of top officers trusts Deputy Defense Minister Gromov (54 percent); only 17 percent reject him. Thus Gromov is almost as popular among the officers as Lebed, general of the 14th Army in Moldova, who is trusted by 57 percent of the officers.

In the lead among active politicians of the Russian Federation are the economist and reformer Yavlinskiy (44 percent trust, 26 percent reject) and the present prime minister Chernomyrdin (36 percent trust, 31 percent reject). Zyuganov, incidentally, is trusted by 30 percent, rejected by 42 percent, and Major General Rutsikoy is trusted by 30 percent, rejected by 46 percent.

POLICY

Debating Necessity of Mobile Forces

95UM0036A Moscow KOMMERSANT-DAILY
in Russian 8 Oct 94 p 4

[Article by Ilya Bulavinov: "Easier to Win Twice Than to Reform Once"]

[FBIS Translated Text] The need for restructuring the Soviet Army, which Russia inherited following the disintegration of the USSR, is not denied by anyone. Politicians have spoken of the need for imparting a "human countenance" to it, and economists have insisted on reducing its numerical strength and the expenses of its maintenance. The military themselves were also forced to tackle the reform head-on: They had to accommodate troops coming from Eastern Europe and the Baltics, and retaylor all operational plans.

The Fate of New Units Never Has Been Determined

The present generation of Russian military personnel came into power under the slogan "A Small But Better Army." Even the future numerical strength of the army was named—1.5 million persons (in May 1992 it was around 2.8 million). However, after thinking about it, the generals began saying that leaving the army with less than 2 million would be dangerous to the country's defense capability. But the president, once again after some thought, issued the command to reduce strength down to a million and a half. According to current plans of the military department, the reduction schedule looks like this: As of 1 January 1995 the listed strength of the armed forces should be 1,917,000 persons, after 2 years it should be 1.7 million, and by the year 2000 it should come down to 1.5 million.

As far as "better" is concerned, the Mobile Forces were to become the flagship in this direction. The initial proposal was to form them out of airborne forces, military transport aviation and the most battleworthy formations of the military districts. In this case the military wanted to present the concept of creation of the mobile forces to the president for approval by as early as the beginning of summer 1994. But they have not yet been able to decide what airplanes and what resources should be ordered for troop transportation, what helicopters should be used to support these forces, and last and most importantly, whether a centralized command should be created and the Mobile Forces should be singled out as a separate large strategic formation, or whether it would be more suitable and cheaper to simply have such units in every sector in order to carry out local missions, putting reliance upon combat aviation.

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According to information possessed by KOMMERSANT-DAILY, the final decision regarding the fate of the Mobile Forces has been postponed to next year as a minimum. Even so, the unpleasant rumor that "elite special-forces policing units" would be created to carry out missions within the country began spreading anyway.

The Eliteness of the Units Depends on Their Commanders

Inasmuch as the main emphasis in the discussion of this subject is laid upon the "special purpose" of the Moscow Military District, KOMMERSANT-DAILY went to Lieutenant General Igor Puzanov, the first deputy troop commander of the Moscow Military District, for an explanation.

"Believe me, we don't need to create anything. If the need arises, there is someone to give orders, and there is someone to carry the orders out," said General Puzanov. "If the 27th Separate Motorized Rifle Brigade (stationed in Teplyy Stan.—KOMMERSANT-DAILY) has been placed within the composition of the Mobile Forces, nothing has changed as a result. It is still the 27th Motorized Rifle Brigade. You could hang a sign by the gate 'The Elite of the Mobile Forces,' but in essence it will remain the same as before. The eliteness of a unit is determined by its condition and by who is in command of it. And there are both excellent units and ones of lower excellence in the airborne forces. In precisely the same way, there are good and not so good units in the motorized rifle and tank forces."

In the opinion of the troop commander the nature of conflicts in the CIS and Russia presupposes presence of mobile forces, "and any units could be utilized as policing units, be they mobile forces or not." "The Moscow Military District has no plans to introduce troops into Moscow in the same way that there had been none last year. Such situations cannot be predicted by anyone. They are not obedient to common sense," said Igor Puzanov.

The Army Must Know How To Live in the Field

The army's financing and accommodation and adaptation of forces withdrawn from Eastern Europe and the Baltics to the new conditions have doubtlessly become the most important problems confronting the Russian military. Reproaches regarding "sluggishly proceeding army reform" (Boris Yeltsin's expression) directed at the generals are being heard increasingly more frequently in this case. The problems that have befallen the army, multiplied by the need for carrying out fundamentally new operational missions, have also

affected the Moscow Military District. And as it turns out, far from all military personnel tend to point to "objective difficulties"

"The fact that units have been transferred to a new place of service has no bearing on combat readiness," said General Puzanov. "Social and personal accommodation is a secondary issue, and it is associated with combat readiness in only a relative way. An army that needs permanent facilities in order to engage in combat activities is not an army but an operetta. Only the Kremlin regiment can live in the Kremlin. In the meantime normal ground forces are supposed to be in the field. One should not associate presence of palatial buildings at military posts with the level of combat readiness."

"It has become fashionable to whine that there is no money. Things have gone so far that you could hear a platoon leader say that he can't command well because the army isn't receiving adequate financing. But if we were suddenly inundated with money, and we continued to maintain the same attitude toward work as today, all of this financing would be useless. A distinction must be drawn between what depends on financing and what depends on us. It is not because Grachev is at the helm of the armed forces that things are bad in the army today. All of us are simply not doing enough in our respective jobs," feels General Puzanov.

OGONEK Interview With Lebed

95UM0049A Donetsk AKTSENT in Russian
22 Oct 94 pp 1,2,4

[Article by I. Milshteyn and interview with 14th Army Commander General Aleksandr Ivanovich Lebed by F. Babitskiy, OGONEK, in 14th Army Headquarters, occasion and date not specified, under rubric "Frankly About Something Important": "General Aleksandr Lebed: 'Russia Will Not Survive a War!"; photograph of Lebed included]

[FBIS Translated Text]] *General Lebed resembles a monument to General Lebed.*

The immovable face in the television shot is as if hewn from stone. Granite lips are tightly compressed. Eyes are cold and mocking.

The General pauses. The interviewer fidgets in the chair. He is uncomfortable...

...The General makes Moscow nervous...

And the General does not seek to have people love him. He knows precisely based on his Dniester Republic experience that fear is more reliable than love. Moscow is rather afraid of the peacemaker...

Monument to a Peacemaker

General Lebed resembles a monument to General Lebed.

The immovable face in the television shot is as if hewn from stone. Granite lips are tightly compressed. Eyes are cold and mocking.

The General pauses. The interviewer fidgets in the chair. He is uncomfortable.

The General's lips part. He filters his words slowly and with authority. His voice is heavy and lifeless, like a robot. He gives the interview like he really is not a human being, but a monument...

Of course, this is a viewer's impression. Television journalists could not pass up a person with such a voice, appearance and career. The "hunt" for the general was begun, it seems, back by VZGLYAD of perestroika times. Lebed then was abrupt with journalists. I recall that he sat them down in front of him and solemnly uttered literally the following: "I will not listen to any of your questions, but will say only what I wish to say. Then you will leave..."

That is how the myth about the General formed—obstinate, abrupt and rebellious. That was the first time notice had been taken of him, and Russian society did not like him. The war in the Dniester Republic, and even more the peace which was established there, made changes to the already finished portrait.

"Peace" did not seem to be an absolute value at the beginning of perestroika. In the first internecine wars, society actively sought (and found) the just and the guilty. Now these searches have been concluded out of complete hopelessness... Among the stories which went around about the General, the following one was especially popular: the war in the Dniester Republic allegedly ended after Lebed not only swore to hang the Moldovan leadership on roadside poles, but even pointed out those specific poles from which his enemies would dangle if they did not stop combat operations immediately. It was by no means all that way, but a fact is a fact: the war between Kishinev and Tiraspol concluded swiftly through General Lebed's efforts and has not been renewed to this day.

Today the Russian 14th Army commander is fighting his former comrades-in-arms, the leadership of the Dniester-Moldovan Republic. Having lost the habit of seeking the just and guilty in all such wars, we will not begin looking for them here as well. We will note only that the inevitable happened: after having dealt with the "external" enemy, both sides are unable to come to an agreement with each other, nor do they wish to do so. Fortunately, their confrontation is not in the nature

of all-out carnage. There is no civil war in the Dniester Republic, nor is one foreseen. This too is clearly to the credit of the Russian general.

The General makes Moscow nervous. The mysterious story about the "disbanding" of his army, about Yeltsin's intercession and the subsequent televised fraternization of Lebed and Grachev clearly indicates only one thing: the capital's Army authorities have no special liking for the peacemaker, but cannot cope with him. And the General does not seek to have people love him. He knows precisely based on his Dniester Republic experience that fear is more reliable than love. Moscow is rather afraid of the peacemaker...

The recalcitrant General for now suits many: Moscow, Kishinev and Tiraspol willingly use him in their own political games, which Lebed surmises and to which he does not object... Of course, that cannot last forever, but it can continue for a very long time. About ten years as a minimum.

A peacemaking General at the head of a well armed and organized army is irreplaceable in troubled times. His stony voice and ruthless gaze have a persuasive effect on professional patriots and on unprofessional but very bloodthirsty murderers.

The General is wise. He plays politics, but not once yet has he become seriously carried away with this game. He has not become lost in it. It seems it is just as repulsive to him as war. He already has had enough of fighting, and there is little he has not seen. And he knows precisely that as long as his army is in the Dniester Republic, there will be no war there.

I became acquainted with 14th Army Commander Aleksandr Lebed at a rally of mourning in Bendery in memory of those who died in the Dniester war. The General's mood hardly disposed him to meet with correspondents: the crowd that had gathered had just been booing him, and the Dniester Republic leadership, present in full strength, did not even deem it necessary to greet the person whom just recently they had been calling nothing other than "our savior." Aleksandr Ivanovich invited me to come see him on the following day at Army headquarters, where we had a conversation.

(I. MILSHTEYN)

[OGONEK] Aleksandr Ivanovich, you once told one of my colleagues that service in the capital is not for you. Why?

[Lebed] Well, because in Moscow even a general is the very same as a clerk, and I can't shuffle papers. But here I really am doing something necessary.

[OGONEK] Why do you think the Ministry of Defense rested its choice on you in appointing a new commander (at the very height of the war on the Dniester)? Was it not because you are not one of those who will begin coordinating every step with Moscow?

[Lebed] You know, I never thought about this, but perhaps you are right.

[OGONEK] And is it true that at that moment 14th Army officers were ready to move the troops against Kishinev without authorization?

[Lebed] In time any war has the characteristic of accumulating myths. I would not be surprised if they already told you that on the eve of my appointment a flock of white swans [lebed] circled in the sky over the Dniester. But seriously speaking, at that time the army was a CIS army or, to put it in Russian, nobody's army. Only on 1 April did it receive the official status of Russian and the process of establishing Moscow's jurisdiction over it was proceeding: they compiled unit rolls and inventoried property. Then suddenly there was a conflict in which the army's role was not defined. Naturally there was disorder and vacillation, but there was no talk, as you put it, of an "offensive without authorization." The army was and remained Russian and obeyed only orders from Moscow. That is how I took it over on 25 June.

[OGONEK] At that time rumors spread through Moscow that Iliescu allegedly was ready to give the order to the Romanian Army to make an assault crossing of the Prut under the pretext of assisting fraternal Moldova in order to annex it. Were these only rumors?

[Lebed] I am hearing this from you for the first time. With its economy, Romania simply is incapable of such a grandiose operation.

[OGONEK] And Moldova?

[Lebed] Moldova all the more. Its coefficient of technological dependence on Russia is 0.995. For example, they make wine here, but cannot pour it into anything without purchasing containers from us. It is the very same with all the rest.

[OGONEK] That must be why Moldovan politicians are trying so hard to get rid of such a formidable neighbor as your army?

[Lebed] No, that's not why. It is simply that the fight for 14th Army's withdrawal provides them with such a harvest in the field of big politics that they would prefer to wage it as long as possible, until the next elections at a minimum. The situation in the country is not one of the best, and in order to stay afloat, some politician must come out with such demands even

against his own will. This does not in any way pertain to a real solution to the problem. The fact is that there are impartial calculations, and they show that with the most favorable concurrence of circumstances it will take at least 45 months to remove the ammunition alone from here. No one as yet has had a serious talk with Ukraine about what it will ask for transit. It can be assumed it will ask a great deal, because one of its railroad branch lines will be fully clogged with ammunition transports—specifically transports of 10 railcars each, not 49-car trains. The fact is, this is dangerous cargo. Arzamas still has not been erased from our memory. And risk increases the transit cost even more. Suffice it to say that removing just one missile brigade from Beltsy (more correctly, its remnants, fitting in two trains) would cost us \$185 million. Let's call a spade a spade: with its present economic disintegration Russia has no money to withdraw the army. It seemingly is more needed by Moldova, so perhaps it will help us financially? Or does it figure the army will leave "without luggage," so to speak? Well, it will not agree to the first—things are no better with the economy there—and we will not agree to the second...

I think our army is here for a long time. In what capacity and on what terms have to be negotiated.

[OGONEK] Obviously it will be reorganized now as a foreign Russian military base?

[Lebed] This too is from the realm of myths. No, I am not saying there will be no base or that it is not needed, simply that rumors about reorganizing 14th Army as a base are groundless for now. They obviously arose because of certain political journalists who perceived an analogy with Georgia here.

[OGONEK] Why specifically with Georgia?

[Lebed] The Georgians got what they had been asking for—they all fought with everyone. In the final account they were forced to agree to the stationing of three of our bases—army, navy and air force—on their territory, essentially all for the very same thing—to separate them. Although if it were up to me, I would not have sent one of my soldiers anywhere near there. To clear their 100,000 mines!.. Let whoever laid them now clear them. In short, the state of affairs here seemed familiar to someone, and the myth of a Russian base arose. You can suggest what you like. For now, I know only that as a result of the ninth round of Russian-Moldovan talks, the parties concluded that 14th Army can be withdrawn four years after an appropriate treaty is signed. They have not yet even come close to this treaty itself. God knows when they will conclude it.

[OGONEK] Aleksandr Ivanovich, I take it from your words that there is a difference nevertheless between the civil war in Georgia and the Dniester war of 1992?

[Lebed] It so happened historically that Dniester Republic territory never was part either of Moldova or let alone of Romania. This territory was transferred to the Moldavian SSR in 1940 in a strong-willed manner, as Crimea later was given over to Ukraine by Khrushchev. Little Russia was here under the Czar and Moldavian ASSR as part of Ukraine under the Bolsheviks. Moldavians never made up the majority here, and those who survived considered themselves not "russkiye" [Russians], of course, but "rossiyane" [Russians], like the Russians [russkiye], Ukrainians, Gypsies, Jews, Bulgars and Gagauz. And with the republic's withdrawal from the Soviet Union, they ended up in a country alien and unfriendly toward them. Herein lie the local specifics. That situation does not exist in Georgia, for example.

[OGONEK] Now the second anniversary of the Dniester war is being observed on both banks. But when the talk turns to who won it after all, both Moldovans and Dniester people unanimously name 14th Army and its commander...

[Lebed] This is not true. There are no winners in such a war, nor can there be. I see new cemeteries, I see young disabled persons, widows and orphans in mourning and, finally, I see ruin, but I see no pluses from this war. Take a look at Karabakh. Do you think someone ever will win there? No. Take a look at Lebanon, where the war has been going on for 18 years now. Take a look at Afghanistan. How much they shouted there: "Just take away your troops, and everything will all come out right by itself in the end." We took them out. Well, previously at least they were fighting in distant provinces, but now Kabul also has been smashed by mortars brick by brick. Because for a long time already it has not been a struggle between parties that has been going on there, but a blood feud—for a brother, for a friend, for a neighbor. Clans, tribes and peoples are infected with mutual hatred. Hekmatyar is Pushtun, Masud is Tajik, Dustum is Uzbek. And not one will give way to the other. And here, by the way, there was no ethnic conflict. The ethnic makeup of the population of both banks is approximately the same here. For example, Viktor Vasilyevich Guslyakov, chief of the Bendery police and a former militia colonel, is Russian. And Ukrainian Lieutenant Colonel Kostenko fought against him. Here in fact relatives often were firing at each other. An idiotic situation. For simple people it was absolutely unnecessary. The politicians wanted it. So the slaughter managed to be stopped—thank God! But in my opinion it is simply cynical to look for victors. Rather, it is necessary to speak of the triumph of

common sense. In the final account all wars, even hundred year wars, end sometime. It is another matter that now the process of reconciliation and restoration of normal ties between the banks will be a long one. It is impossible just simply to say to people: "Forget everything." How is one to forget when children deprived of parents have not yet grown up, when widows—still quite little girls—visit the graves of husbands who did not return, and even bullet marks have not yet been patched up on all the houses. Only time heals such wounds.

[OGONEK] But not just the bad is forgotten in time. Just quite recently they were ready to carry you in their arms as a people's hero of the Dniester Republic, but at the Bendery rally yesterday the crowd was shouting: "Black Lebed! Get the traitor-general off the rostrum!"

[Lebed] Everything is normal here. That always was the case before us, and I fear it will be that way for a very long time after us: when there is peace it is "sons of bitches," and when there is war it is "brothers." This time as well, the tradition has not been violated. Well, I personally did not change my positions during this time. I am 44, and at this age, you will agree, it is already possible to depart from your own positions. But what changed around me is quite another matter. No, I lay no claim to the title of local saint or prophet. I generally lay claim to nothing. I have not been rewarded here with money, a house, a car or even a local decoration. In short, not one Dniester leader can boast that he "presented" something to me. And what happened at the rally?.. Let's put it this way: this was a measure staged in advance (but still poorly) with this nun (the Serbian nun Mother Angelina, a constant participant of patriotic rallies who gives anti-Semitic speeches—F.B.), who said what nuns cannot say—if it had been Andreyeva (one of the Dniester leaders—F.B.) who said it, I would have understood. Well then, what happened was that people were fighting for one thing, but got something else. The Dniester Republic was renowned for corruption during these years. It is no secret that wide-scale embezzlement was organized here "from above." It is sad, but a fact, that people who fought for the Republic with guns in hand, and often without them, in the best instance have been shuffled off to quaternary roles today. The bulk of "guardsmen" who were standing around in camouflage clothing at the rally were all kinds of lazybones who either did not see the war at all, or saw it, but only through binoculars. A lot of widows, orphans and cripples remained after the war. I personally raised the question more than once (not at all argumentatively at first) about how they could be helped—with work, benefits, allowances. I spoke both with Smirnov and with Marakutsa. At one time this was a safe city. You of course may not agree and may say that there was military order here. But in my opinion, at times only military order saves the situation. I also posed these questions: Let us at least preserve what has been achieved, let us organize

joint patrolling of streets. I still keep copies of all these letters with proposals. They did not object, but all initiatives also disappeared like water into the sand.

And the authorities did the very opposite. On 1 December 1992 an entire special-purpose militia company was discharged as having "discredited" itself. And two of those discharged had come on duty on 27 November and obviously in three days had managed to discredit all and everything so much that it remained for them only to be discharged. Almost 150 persons left the Dniester Battalion. The men sensed that something wrong was occurring. Instead of serious operations, they would be sent to chase old women at the bazaar and to search for stolen chickens.

The impetus was given about four months ago. We surrounded a nearby farmstead and tied up one criminal authority nicknamed "Stas" with his friends, and with them weapons, stolen foreign stamps and up to a billion in cash. That was in the morning, but by dinner Stas already had been set free and everything taken had been returned to him. And then they began to threaten the fighting men: "You just wait, cop, we will remember you." That is to say, the authorities are doing everything dependent on them to see that there is no order of any kind. Disorder, excesses, and war hysteria are advantageous to them, inasmuch as if only minimal order sets in, then trials will follow and those now sitting here in personal chairs will exchange them for seats in a common dock. I have grounds to expect just that finale. It is a great pity, but the educational level of the Dniester-Moldovan Republic leaders is such that they do not even come close to picturing the consequences of their activity.

There are a lot of folks here with a criminal past. The chairman of the OSTK (Joint Union of Labor Collectives—F.B.) has a previous conviction and the minister of local industry has two. Both were convicted for theft of personal property. Well, the boys played pranks in their youth, but now they have settled down—they have joined the bigwigs. And so it happens that if a guilty party is not found urgently, then they themselves will have to answer for all the criminal activity [bardak] in the republic. So at the rally they simply were brainwashing public opinion on the "traitor-general" theme.

[OGONEK] Then was it worth it to go there, listen and have a look?..

[Lebed] No, why not? It is customary to pick up a thrown gauntlet. In the final account, I am an honorary citizen of Bendery. Again, I received an invitation from the mayor there with a request to speak. Then again, I saw the last rally. The people really were there.

A living chain formed from Tiraspol to Bendery. People cried. But here was sheer bureaucracy and window-dressing.

There also were many "professional" participants. The old women you mentioned that were shouting something about me—I recalled all of them on sight. At least they could have renewed their little signs. But it is always "Thanks to Smirnov and Shevtsov that we are alive!" A familiar tune? I will tell you a secret: their Mrs. Andreyeva is supplied with food for taking part in rallies. I don't know the rate.

[OGONEK] Aleksandr Ivanovich, your friction with Dniester-Moldovan Republic authorities is no secret to anyone, but no one has yet managed to hear from you if only one sharp word about the armed forces here.

[Lebed] I do not plan to revile them or boast about them. The conversation has to be on another plane. First of all, there really is an army. I do not know the precise numerical strength, but somewhere on the order of 8,000 persons. These are all people who previously served in 14th Army. For what motives did they leave? Some retired, some were discharged—it varied. In principle the people are not bad. But nothing has to be done to decompose any army down to molecules. Just say: "Lads, you wear shoulderboards and you wear them freely, only don't strain yourselves." Then the lads will plan and do everything themselves. Further, Mr. Smirnov rests hopes on this law—take a look at the second paragraph. "On reaching an understanding on the withdrawal of Russian Federation military units and formations and with their disbanding, their equipment, arms and real property remain the property of the Dniester-Moldovan Republic." All this is dated 15 February, i.e., Smirnov figures that when 14th Army collapses, a certain number of officers and warrant officers and military property also will go over to him, and he didn't want to give a damn about anyone. True, he gave insufficient consideration to the fact that there exists the agreement on a reduction of conventional arms in Europe, in accordance with which each state has a quota. Russia, Ukraine and Moldova have one, but not the Dniester Republic, which for now has not been recognized and is not a subject of international law. And were the republic suddenly to have over a hundred of our tanks, it simply would be isolated. They will cut off all transportation, power, pipelines and say: Take a rest with your guns if you do not wish to obey the laws. Well, and the final thing: Smirnov forgot that the legal situation has changed in two years. If he tries to take a CIS army under his jurisdiction, I think this would be welcomed by many in the military. In place of this, a law came out then according to which the army was recognized as Russian and friendly and servicemen

enjoy all civil rights on territory of the Dniester-Moldovan Republic. Now suddenly this law "on changes and additions..." to this is being adopted. Got it? A bit late.

[OGONEK] Spiteful tongues from among local journalists are saying that 14th Army has such cadre problems that one might as well consider you no longer an army commander, but a division commander. Allegedly the entire army consists of 59th Guards Division. Are we to believe it or not?

[Lebed] Of course, we have reduced-strength units. There also are those authorized to be small in numbers, such as the military procuracy. But there is 59th Division, there are four brigades, there are two separate regiments, there is a repair, overhaul and rebuilding base, and there are a lot of separate battalions at 100 percent strength. So all this is no more than an attempt to downgrade the significance of the army. You with your division, they say, don't make the weather. Well, if we don't, we don't. I lay claim to nothing. But if you think we are weak, try to take me prisoner sometime. There have been no such attempts for now.

[OGONEK] Aleksandr Ivanovich, are you in the picture as to the extent to which your name stirs up capital journalists? It is customary for us to perceive your service here just about as the Parisians perceived Napoleon's Italian campaign. And some repeat with fear, others with hope: "When Lebed comes, he will show everyone!"

[Lebed] You know, I don't spread or collect rumors, but I really have been lucky with campaigns. I was in Afghanistan, I was in Azerbaijan, I was in Georgia, I moved feebly on Moscow twice, in August I was at the building of the Russian Supreme Soviet, and now I ended up here. I have had occasion to spend a considerable part of life in war. And so I say to you the very same as I said yesterday at the rally, and I repeat to everyone: we are tired of wars. Moreover, not one war, in my view, is capable of deciding anything. But Russia will not survive one more war, the third one in this century.

Grachev Touts Military-Patriotic Education

*MM2110141594 Moscow KRASNAYA ZVEZDA
in Russian 20 Oct 94 pp 1,3*

[Aleksandr Kovalev report: "Educating a Patriot, Serviceman, and Citizen Is Today the Main Task for a School. We Report the Details of the Russian Federation Defense Minister's Meeting With Students at the City of Kaliningrad Near Moscow"]

[FBIS Translated Text] It is difficult to talk to young people today. The doors of their souls are often shut tight. But should they be blamed for this! After all, this is like an intuitive response to the spiritual and moral garbage among which they live. You have to look truth in the face: Our young people are sick because all of our society is sick. The process of things being restructured, reshaped, and shot at, which has affected us all one way or another, has no doubt affected the younger generation most painfully, most acutely of all.

The younger generation does not trust us. It avoids looking at us. It turns its back on us. But we are still nearby, we can still explain ourselves, we can still understand one another.

Today scarcely any statesman has the courage to speak to young people eye to eye. But the minister of defense ventured to do so. Someone may remark, he said, that God himself ordered him to do so, his post, a most "masculine" one, makes it incumbent on him. That may be, but we must not nevertheless forget that our army is currently the focus of unwavering outside interest, it is exposed, it is laid bare like a nerve, and virtually everyone is striving to grab hold of it, and, what is more, as painfully and spitefully as possible.

At the moment it is unclear who is in the more difficult position.

The defense minister arrived for the meeting not alone, but with "reinforcements." With a special purpose forces company and the "Blue Berets" vocal-instrumental ensemble. They were to conduct "probing action" of the "defensive procedures" of the young people's skepticism.

They were entirely successful. The girls were enraptured, and the boys were carried away by dreams of "being like them."

The defense minister did not bring their dreams down to earth when he explained that the audience were seeing the best soldiers in the world. And he recalled that once our paratroop battalion, which is serving in Yugoslavia under the aegis of the United Nations, invited representatives of equivalent battalions of other countries, including Americans. In order to exchange experience, as is the custom. And it must be noted that the peacekeeping mission in Yugoslavia is being conducted by real military professionals, regardless of their nationality. So, when our men showed what they were capable of, the Americans could not believe their eyes. They said straight out: This is fantastic. It turns out that they thought that such things were only possible in block-busters. But their Stallones and Van Dammes are invincible only on the cinema screens, where countless blank shots are fired and colored water flows instead of blood.

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In a real warfare, in real combat, where the price of a mistake is not a bad report, but your life or that of your comrade, these Russian lads are the ones who are invincible.

They are invincible just as our grandfathers and great-grandfathers were invincible in their day. The whole world knows about this. But it is a real pity that our younger generation does not know all that much about it. This is not the fault of young people, but the trouble with education in our state.

As the defense minister noted, you do not need to go far to find curious examples, to put it mildly, in education and upbringing. It all starts with the alphabet. Postwar editions of the primer until very recently contained an obligatory military-patriotic theme. There were short but meaningful words about soldiers, a selection of orders and medals, portraits of Yuriy Gagarin and eminent military chiefs, and tastefully selected texts and illustrations. But the current primer, through which our children and grandchildren perceive the world, does not say a single word about the army, about soldiers, or about the protection of the motherland. This is the distressing evolution that the primer has undergone deep inside the "Prosveshcheniye" publishing house.

There is not a single word about today's army in the "Reading Books" intended for schoolchildren in the elementary grades either. They speak at greater length and more loftily about princes' castles than about the achievements of our forefathers. Even the textbook of the history of the Fatherland for the 11th grade is meager with the names of national heroes. And after all, even Nikolay Mikhaylovich Karamzin was convinced that the history of a state would come to an end if no heroes were left in it.

In the minister's opinion, this is not just an omission. This is a very short-sighted, to put it mildly, attempt to demilitarize the awareness of children, as it were, that is, bar them from military subjects altogether. If it were only military subjects!

The fact that our national assets are tremendous, that they are worthy of pride and respect is mentioned somehow in a hurried, apparently shame-faced way. We have names and ideals whose beckoning light will never go out. There are examples of unparalleled valor and courage, resoluteness of spirit and undying love for the fatherland—in all ages. Sergey Radonezhskiy and Peter the Great, Pushkin and Lermontov, Sholokhov and Bulgakov, Lomonosov and Kurchatov, Korolev and Gagarin, the Panfilovites and the people affected by the Chernobyl disaster, the defenders of the Brest fortress and the fighters of the 12th border guard post.

Even today they are among us, people of radiant ideas, with a developed feeling of worthiness, honor and duty, people who, no matter how difficult things are, defend the front of state interests and do not give up our spiritual and moral bridgeheads. But, as they say in the army, people today do not take their cue from them.

In the desire to get rid of what is ossified and outdated in our country, as has often been the case before, when it came to destroying things, this was done successfully, but nothing has been built instead. Rituals have been abolished, guidelines have been changed. But the route for advancing toward what is new has not been outlined or indicated.

And this is the result. Judging by data from certain sociological investigations, 36 percent of our young people want to leave the motherland. Only 23 percent consider themselves to be patriots. Only one in five is prepared to take his place in a military formation and defend the fatherland. Every other young person is convinced that what is most important today is material prosperity and that all means are justified to achieve this end, including illegal means.

Approximately 60 percent of all crimes in Russia are committed by young people aged 14-24. Crimes committed by minors has recently grown seven times more quickly than the number of the adolescents themselves.

We should kick up a great fuss about this, young people should be given useful things to do, a program for educating them should be elaborated, but we are even destroying what used to serve the state interests well in the past.

No doubt in order to prove that we are really peaceful people and our armored train is not even standing on the sidings, but has long since been rusting on the scrap heap, initial military training has been urgently replaced in Russian schools by the unintelligible "Fundamentals of Security in Vital Activity." It was considered that this course is more adapted to the modern conditions of our life and the concept of school education. One of the arguments used was the claim that apparently there is no such subject as initial military training in civilized countries. Not at all? Such a system of training young people for the army and educating them in the spirit of loyalty to national interests exists in one form or another in all self-respecting countries. France, Germany, and the United States were not embarrassed to adopt our experience of the military-patriotic education of young people. The "ready for labor and defense" program [of activities], which has already been forgotten in our country, formed, for instance, the foundation of youth fitness programs in many countries throughout the world.

But to return to the "Fundamentals of Security." So far there are neither intelligible textbooks nor systematic visual aids to go with the new subject. The relevant work to train teaching staff to teach this subject is not being carried out either. As a result, there remain approximately only 40 percent of the former military instructors—now known as instructors and organizers of the fundamentals of security in vital activity—throughout all of Russia's schools. And in the past their work was considered to be both prestigious and well-paid. Now that the fundamentals of security in vital activity has been introduced, there are no privileges and the pay is humiliatingly low, and indeed the prestige has been lost.

Incidentally, the question of reintroducing the former initial military training in schools has been raised repeatedly. But the Ministry of Education does not intend to assume this burden. The basic reason for the refusal is clear—financial difficulties. But is it worth economizing on the education of the future defenders of the fatherland? The only thing the Ministry of Education is agreeing to do is to introduce optional courses not only in the 11th grade, but also in the 10th grade for two hours a week, and this out of the funds of the Ministry of Defense. But is this really the solution?

Of course objectors will definitely be found, stating that the army and the defense minister are obviously just watching over the narrow interests of their own department.

But this is not true. This is a nationwide interest. Military-patriotic training of young people in one form or another has existed in Russia since time immemorial. Our country's traditions in this respect are extremely strong. At the beginning of the century the famous publicist Mstislavskiy wrote that our army was at that time close to the ideal, when all the people were prepared for military service and when the state's family, class and religious life took every person into the system of heroic education at the beginning of his life.

And in a country which is so rich in patriotic traditions, where even in 1989 there were over 3,000 military-patriotic clubs for children and young people and when every other boy dreamed of serving in the paratroops, today we are having to discuss the problems of the unpopularity of the military-education disciplines. So, the minister of defense noted, we should not only be talking about omissions in the training program here, but also be reflecting on the state of society.

In self-respecting countries, which it is fashionable in our country to emulate today, a man will not make his name in politics unless he has served in the army. For

instance, in Turkey, there is even a law under which a man cannot occupy a senior state post if he has not known the sweat of toil as a soldier.

Of course it would be better to emulate our own traditions. A defender of the fatherland has always been specially respected in Rus. If someone belittled on this glorious vocation, then the "shapers of opinion in their own regions would raise their voices in its defense. Teachers first and foremost.

A very great deal depends on the personality of the teacher and his authority. According to the minister of defense, there are people to emulate even today. Even now there are many true heroes. And we could do with more headmasters like Nikolay Yuryevich Marsov and military leaders like Vladimir Nikolayevich Mikhaylov. They are working in School No. 2 in the city of Kaliningrad in the Moscow area.

There is no such subject as military patriotism on school timetables today. But there is here. It is doubtless no accident that in the past five years 90 school-leavers have linked their destiny with the army and become officers, and another 50 people are currently studying in higher military-education institutes.

Our eminent diplomat in the last century Prince Aleksandr Mikhaylovich Gorchakov said that world history knows no examples of strong armies existing side by side with poor schools. And this is the truth.

"I am deeply convinced," the defense minister stated, "that a new ideology is necessary in our schools for the educational and training process." Where can we find it? In age-old national spirituality, in our patriotic self-perception, cultural traditions, and in our history. Schools should become for our children a place of creative knowledge of the world and radiant discoveries. A school should be an institution inculcating in the younger generation a sense of state power, elevating the young soul with pride in the fatherland, the achievements of our forefathers, nurturing national dignity, and training the citizen and patriot.

This is vital if only because, as the well-known Russian publicist and historian Mikhail Osipovich Menshikov aptly put it, only a state whose younger generation chooses patriotism has a future.

The present time and the very situation in the country demand an integral, deeply thought-out system of educational work with the younger generation.

It goes without saying that what should be perceived here first and foremost should not be the efforts of individuals and parties, sponsors and patrons, but the power and influence of the whole of society and the

state. This should be real state youth policy with an obligatory moral component. What is the role of the Ministry of Defense here?

It is precisely the Ministry of Defense that is at present working in this sphere. The elaboration of the State Program for the Patriotic Education of Young People has been concluded. It is currently being examined by the government.

In fact, we have a unique opportunity today in terms of considerably strengthening the entire system of the patriotic education of young people. We are preparing to greet the sacred festival of the 50th anniversary of the Great Victory of our people in the war against Hitler's Germany. Just over six months remain until those glorious days. Schools can and should do a great deal to revive the good traditions of tutorship by veterans, and the education of those who are learning from the example of the military valor of older generations, wholehearted loyalty to the fatherland, and their readiness to serve it selflessly.

Today Russia needs patriots. "Love Russia in bad weather," said the poet. And today the country is indeed experiencing difficult times.

But whom can it count on if not us?

"And that is why," the minister of defense said, addressing those assembled, "I suggest that in the future you should think: 'Dodging classes is desertion, a bad report is capture by the enemy.'"

In his time the remarkable Russian pedagogue Konstantin Dmitriyevich Ushinskiy liked to repeat in his work and in his lectures that education is almost always a battle, when you need to fight through to a young soul with the light of the truth, the warmth of goodness, and the fire of love.

The minister of defense is familiar with battles of a different sort, in the direct, elementary sense of the word. This time the attack was of a "scholastic" nature.

When it was all over, Sergey Kalugin, the happy owner of a paratrooper's striped jersey which he received from a special purpose forces serviceman, amused the public with the statement that he would not take it off except on the orders of the minister of defense.

It seems that the attack did not misfire.

New Finance Ministry Taxation Policy on Servicemen

95UM0039A Moscow KRASNAYA ZVEZDA in Russian
6 Oct 94 pp 1, 3

[Article by Ivan Ivanyuk: "Finance Ministry Decides It's Easiest To Collect Taxes From Servicemen. Is This the Way To 'Patch Up' the Budget?"]

[FBIS Translated Text] The existing tax system in our country angers everyone—both those who pay the taxes, and those who live off of these taxes. On one hand they are strangling the producers, while on the other hand budget receipts are depressingly low. It would be sufficient to say that in the first half of the year the state treasury failed to receive almost half of the monetary resources it had been counting on from the tax rates, even considering forecasted inflation. And how much was concealed from the eyes of the tax inspector?

Taxes are not an end unto themselves. They are a means of raising the economy's effectiveness. Judging from everything, people are remembering this more and more frequently in government circles at the eve of the "hot" political autumn. Some reviewers feel, not without grounds, that the Cabinet of Ministers will survive in its present composition only if it is able to finally stop the production decline and revitalize the work of Russian enterprises. For this, it seems as if the government is prepared to sacrifice taxes. Evidence of this is also found in the work of a government commission on operational problems in recent weeks, and in a document which according to our information was sent to the government from the Ministry of Finances. It discusses the basic directions of tax reform in Russia.

This document, by the way, reflects unity in the struggle between opposites in the state's fiscal policy, and it is aimed not only at developing production but also at replenishing the income side of the budget. Inconsistencies are unavoidable here, and information leaked to the mass media permit commentators to note the presence of significant contradictions in this document, which hasn't yet been widely publicized by the Ministry of Finance.

Thus, in order to compensate for losses from reducing tax pressure upon enterprises, it proposes increasing the profit tax rate to 43-45 percent and to raise the general level of taxation of individuals. In particular (this might have an effect on many of our readers) it proposes reinstating taxation of servicemen. Implementation of this measure is to be timed with the next increase in their pay.

This action is clearly not directed at strengthening the social status of men in uniform. Compensation for introduction of the taxes by a pay increase will only be a one-time thing, and with time, this compensation will be cancelled out, as if it had never existed. And rather than introducing such compensation, it would probably be better to establish pay for officers and warrant officers that is adequate to the physical, mental, psychological and emotional loads they experience. In addition the pay in different structures must be

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reduced to a single common denominator, so that as a beginning, social tension could at least be relieved in the army and navy. What is extremely important is that the military budget will grow in absolute figures. The Ministry of Defense will once again be accused of having an immoderate appetite, while in reality it will never see this money.

But judging from everything, these are all insignificant things to workers of the Ministry of Finance: Their goal is much more global—to noticeably replenish the income side of the budget at the expense of the military. Blessed are the faithful, for things are easy for them in this world.... It was not until 1956 that the Soviet state attempted to fill its coffers through this item. Thirty-five years' experience in taxation of servicemen after 1956 revealed the low effectiveness of this step, and it was rescinded. Edict No. 154 dated 19 February 1992 of the President of the Russian Federation exempted all categories of servicemen from income tax on pay and other monetary remunerations, and from payments associated with execution of their responsibilities of military service. This edict also exempted servicemen granted land parcels for construction of private homes from paying the portion of land tax that goes to the federal budget. The land tax concession for servicemen was broadened in the law "On the Status of Servicemen": They were completely exempted from its payment, as well as from payment of individual property taxes.

So why are the attempts by the Ministry of Finance to wade into the same tax "river" a second time so unpromising? Let's begin with the fact that the budget receipts will hardly be as large as some might imagine. According to estimates of specialists of the Ministry of Defense an income tax on servicemen would bring in around 1.3 trillion rubles annually, given today's pay level. But considering that up to 70 percent of income tax collected from individuals is entered into the budgets of subjects of the Russian Federation and local budgets, the actual amount entering the federal budget may be only around R400 billion. Moreover this won't be real money—it will most likely only be on paper. After all, even in the past, when this tax was in effect, no one collected this money in the army and navy, and it was never transferred anywhere—the amount was initially "credited" at the time money was allocated to the Ministry of Defense for pay for servicemen.

The hopes of replenishing the federal budget at the expense of servicemen paying other forms of taxes are no less justified. The fact is that the 11 August 1994 federal law "On Amending and Supplementing the

RSFSR Law 'On Individual Property Taxes'" deprived privates, seamen, NCOs, petty officers, shore-based and seagoing warrant officers and officers of the tax concessions on buildings, premises and structures. Moreover according to this law only citizens discharged from military service or called up for military training who had fulfilled their international duty in Afghanistan were exempted from the tax, while those "Afghans" who are still serving today did not receive this concession, absurd as this may be. Another fact attesting to the quality of this law's writing is that on the heels of adoption of the 11 August law, the State Duma adopted yet another one in an attempt to restore the status quo in concessions to servicemen regarding the tax on buildings, premises and structures. But for reasons known only to it, the Council of Federation rejected this law.

And now in most cases local tax agencies and bodies of executive government will follow this statute and not the law "On the Status of Servicemen" in collecting individual property tax. But the problem isn't even in the "war" between the laws, however regrettable it may be. Few servicemen own any real estate—the nomadic way of life doesn't give many the opportunity to acquire an apartment, a dacha, a land parcel, and so on. In the best case the federal budget won't receive much more than crumbs.

Nor will the proposed measures to tax servicemen help to solve the problem of local budgets. Yes, in some regions it is an extremely acute one, and in some places military units might essentially be the sole source of money for solving chiefly the social problems of a given city, rayon or town. But it is no accident that this problem had always been solved in the past by subsidies to the territories from the center. After all, a direct interest of the regions in "transfers" from the military budget will lead to an attempt to control all financial activity of the units and subunits, to violation of secrecy, and so on. And the well being of a region will depend on how large a "taxpayer" will be stationed in it. Some local budgets will have it good, while others won't.

To put it more briefly, we can transfer money from one state pocket to another all we want, persuading ourselves and others that the economy is thus receiving a powerful impetus for its development, and that financial stability will soon set in for the country. But there's just one thing I'd like to note: The forerunners of today's financial experts learned to do this at least with minimum social and other costs. Must we once again make the same old mistakes?

Statute on Social Protection for Baykonur Personnel

95UM0039B Moscow KRASNAYA ZVEZDA
in Russian 7 Oct 94 p 3

[Decree No 1122, 1 October 1994, of the Government of the Russian Federation "On Measures To Provide Social Protection to Servicemen and Civilian Personnel of the Armed Forces of the Russian Federation Undergoing Military Service or Working at the Baykonur Cosmodrome and in the City of Leninsk, and to Their Families"]

[FBIS Translated Text] In order to fulfill space programs and strengthen the defense capabilities of the Russian Federation, and to attract and retain highly qualified military specialists at the Baykonur Cosmodrome, the Government of the Russian Federation resolves:

1. To establish the following as of 1 January 1995 for servicemen (except drafted privates, seamen, NCOs and petty officers) serving in military units, staffs, institutions, enterprises and organizations of the Armed Forces of the Russian Federation at the Baykonur Cosmodrome and in the city of Leninsk (henceforth—servicemen):
 - a) time-and-a-half military position pay and rank pay;
 - b) a monthly addition to military position pay (without regard for the time-and-a-half increase) for military service in a region of ecological crisis, amounting to 30 percent;
 - c) a monthly addition to military position pay (without regard for the time-and-a-half increase) for work in space programs, amounting to 50 percent, in correspondence with a list of positions approved by the Russian Federation Ministry of Defense;
 - d) preferential computation of time in service for awarding a pension, at a rate of 1 month of military service for every 2 months.
2. To establish the following as of 1 January 1995 for civilian personnel working in military units, staffs, institutions, enterprises and organizations of the Armed Forces of the Russian Federation located at the Baykonur Cosmodrome and in the city of Leninsk:
 - a) 50 percent higher salaries (rate schedules);
 - b) a monthly addition for work in space programs amounting to 50 percent of the monthly salary (rate schedule) in accordance with a list of positions (occupations) approved by the Russian Federation Ministry of Defense;
 - c) a monthly addition for work in a region of ecological crisis amounting to 30 percent of monthly pay (the rate schedule);
 - d) annual supplementary paid leave for work in a zone of ecological crisis, tentatively 7 work days.
3. To grant the Russian Federation Ministry of Defense the right to build or acquire housing in the Russian Federation for servicemen indicated in item 1 of this decree serving at the Baykonur Cosmodrome and in the city of Leninsk for 10 or more calendar years, 3 years from their discharge and upon attaining the maximum age of military service, in accordance with norms established by legislation.
4. That commercial and personal support to servicemen and civilian personnel of the Armed Forces of the Russian Federation and their families, as well as workers of enterprises, organizations and institutions of the Russian Federation assigned to temporary duty in military units at the Baykonur Cosmodrome for special work, shall be provided through the military trade system of the Russian Federation Ministry of Defense.
5. That the Russian Federation Ministry of Defense shall receive special deliveries of medicines and medical equipment for military therapeutic institutions at the Baykonur Cosmodrome according to the established norms, and grant passes to therapeutic and health improvement institutions on priority and establish, in 1994-1996 in the Russian Federation, a specialized therapeutic and health improvement complex for servicemen and civilian personnel of the Armed Forces of the Russian Federation serving or working at the Baykonur Cosmodrome and in the city of Leninsk, and for their families.
6. To establish, as of 1 January 1995 for children up to 16 years of age and disabled children of servicemen and civilian personnel of the Armed Forces of the Russian Federation serving or working at the Baykonur Cosmodrome and in the city of Leninsk, regardless of age, a free annual stay (on the basis of medical indications) in specialized therapeutic and sanatorium institutions or other health improvement institutions of the Russian Federation, and compensation of 50 percent of the cost of food provided in specialized enterprises and institutions to children on dispensary record.

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7. To extend the action of this decree to servicemen of internal troops, the rank-and-file, commanders and civilian personnel of internal affairs agencies, and to personnel of ministries and departments of the Russian Federation in which military service is foreseen by law, when such persons serve or work at the Baykonur Cosmodrome and in the city of Leningrad, and to their families.
8. The expenses associated with implementing this decree shall be covered within the limits of resources allocated from the federal budget to the ministries and departments indicated in this decree.

[Signed] Chairman of the Government of the Russian Federation V. Chernomyrdin

GROUND TROOPS

Pskov Ammunition Depot Explosion

954F0202A Moscow SEGODNYA in Russian
25 Oct 94 p 7

[Article by SEGODNYA Correspondent Tatyana Shchibanova, Pskov, under the rubric: "Details": "The Airborne Division Thundered Throughout Pskov"]

[FBIS Translated Text] As our newspaper already reported, a very serious fire that resulted in human victims occurred at the Pskov Airborne Division depots in the village of Kislovo (seven kilometers from Pskov) on October 20. A SEGODNYA correspondent has learned the details of this tragic accident from sources close to the official investigation.

The fire began in warehouse No. 7 on October 20. Twelve soldiers headed by Platoon Commander Senior Lieutenant Nikolayev arrived at the warehouse to conduct preventive maintenance work and to prepare equipment for an inspection. The airborne equipment is being stored at the depots in "complete basic load of ammunition" (that is, Ural trucks with trailers are completely loaded with ammunition and are prepared for combat operations at any moment) in accordance with the specific nature of this branch of troops and therefore its inspection and preparation for work normally occurs in two stages. First, the Missile and Artillery Weapons Service (RAV) inspects everything that is in the truck body and then the motor vehicle service begins its work. Several days prior to this, the division RAV did its work and did not detect any malfunctions or defects whatsoever.

On October 18 during an inspection of the technical state of transport vehicles, it was discovered that none of the motor vehicle service soldiers knew how to handle the pre-start heater, without which you simply can't start the vehicles in winter. At that time, already

the 20th, motor vehicle subunit employees once again arrived at the warehouse but already with Boiler Specialist Captain Katkov who showed them how to start the notorious heater. The teaching process ended on the second vehicle (there were a total of eight of them in the warehouse) and then the soldiers themselves began to work under the supervision of Platoon Commander Nikolayev. They didn't manage to start the heater on the sixth vehicle.

Having eliminated the malfunction, they attempted to do that again and in the process "something exploded" under the engine. A somewhat more powerful explosion was heard several seconds later that tore off the roof of the warehouse and ammunition immediately began to explode in the bodies of the vehicles that were parked alongside. Three soldiers—Strizhenok, Yudin and Maksakov—died immediately and Senior Lieutenant Nikolayev was taken to the hospital in serious condition. Another three servicemen managed to drag themselves out of this warehouse before everything began to burn and explode. The fire soon spread to the roof of the neighboring warehouse; according to experts, they could have saved it but the firemen who arrived at the scene of the accident flatly refused to approach it and halted their vehicles one kilometer from the danger zone. As a result, it also went up in smoke with all of its contents. The tensest moment arrived when a third warehouse, where 20 tonnes of TNT was located, began to smoke and "steam". If it had exploded, the airborne division would have in general been left without depots of emergency reserves and everything in a three kilometer radius, including the villages of Timsha and Kislovo, would have burnt to the ground.

Division Commander Major-General Babichev, who had already organized work on withdrawing vehicles from other warehouses, somehow managed to convince five firemen and they, in violation of the order of their leadership, together with military personnel extinguished the fire in the warehouse with the explosives. The fire was completely extinguished at approximately 1800 hours.

At the present time, a special commission, within which Pskov Garrison and Leningrad Military District procuracy agents, and representatives of various services of the General Staff, Russian Ministry of Defense and FSK [not found] are working, is conducting an investigation into the causes of the explosion. So far they haven't managed to determine what served as the initial cause of the accident. The possibility of sabotage is not being excluded although the commission is inclined to assess the accident as the result of carelessness since it has already managed to detect gross violations in the storage of ammunition: boxes with PTUR [antitank guided missiles], PG-7 [round for

grenade launcher] and single action grenades were strewn between the vehicles which should have been located in special current supplies depots. They have managed to establish that one of the boxes in which "grenades were lying with deposits" wasn't sealed. Maybe one of the soldiers decided to become more closely familiar with its contents to learn...

If the version on carelessness is confirmed during the course of the investigation, judging by everything, it won't be easy for the guilty. Three people died and, furthermore, 47 "fully loaded" vehicles and 200 tonnes of ammunition went up in smoke as a result of the accident.

Work continues to disarm scattered projectiles and explosions are heard from time to time on the outskirts of Pskov. The people, who have managed to become accustomed to this thunder over four days, are not paying any more attention to it than to thunder...

AIR, AIR DEFENSE FORCES

Russian AWACS Aircraft Profiled

95UM0012A Warsaw SKRZYDLATA POLSKA
in Russian No 8, Aug 94 pp 44-46

[Article by Yefim Gordon and Vladimir Rigmant:
"Russian AWACS", Part 2]

[FBIS Translated Text] In the beginning of the nineteen seventies the military authorities of the USSR realized that they cannot delay any further their decision to begin work on the design and construction of the DRLO (Dalnoye Radiolokatsionnoye Obnaruzheniye [Long-Range Radar] aircraft which will use the "Shmel" [Bumblebee] system. The radar equipment then used by the USSR PVO had become inadequate for detection of cruise missiles returning weak radar echo signals. Development of electronic technologies in the USSR was lagging more and more behind the intensive development of these technologies in the U.S.A.

Later, in 1976 the American E-3A radar surveillance and guidance system was demonstrated on the proving range of the Nellis base under conditions closely approximating actual service conditions. Six aircraft simulating the MiG-23, two aircraft corresponding to the Yak-28PP with electronic jamming emitters, four ground jamming stations, and two radar sets for guidance of fighter aircraft were mobilized against an AWACS. This test has proved that the E-3A system could operate under conditions of strong interference and guide friendly aircraft toward their targets. None of the participants in this experiment suspected then that an almost identical system was being speedily developed

in the USSR, at the Beriyev Special Design Office under the leadership of Konstantin Konstantinov.

New Generation: A-50 System

How was it that this Design Bureau, which specialized in design of flying boats, was developing an entirely different very complicated aircraft? According to Genadiy Panatov, previously a coworker in other projects and now chief designer at the Beriyev Special Design Office, this came about as a result of the following events.

Attempts by the Tupolev Special Design Bureau to come up with the optimum variant of the "Shmel" system to be built into one of the Tu aircraft failed. There were also neither means nor time available for construction of a new aircraft. To assign the task to the Antonov Special Design Bureau made no sense, inasmuch as the An-12 with its dimensions and flight characteristics was not a suitable candidate for installation of the "Shmel" system, though attempts to redesign it for an airborne laboratory had been made. Most suitable among existing transport aircraft was the Il-76T, which had been flight tested a while ago in 1971. The chief designer G. Novozhilov at the Ilyushin Special Design Bureau, an extremely cautious man, did however categorically refuse to undertake a task as complicated as installation of the new electronic system. The authorities thus faced a difficult problem: having at their disposal both an appropriate aircraft and a reconnaissance system but not having found someone able to put them together. They then decided to assign this task to the Beriyev Special Design Bureau, which had some experience with installation of electronic equipment on heavy transport aircraft (its parent plant in Taganrog had been involved in design and construction of several Tu-142 aircraft variants).

In 1973 both the Council of Ministers and the CPSU Central Committee decreed that a new aircraft DRLO (Dalnoye Radiolokatsionnoye Obnaruzheniye [Long-Range Radar] be built on the basis of the Il-76T transport aircraft and the "Shmel" system, this task being assigned to the Beriyev Special Design Bureau. Because the design was not Beriyev's original one and the authorities did not want to retain the "Il" designation, this aircraft received the noncommittal designation A-50. Later, after Beriyev's death, they tried to retain the letter "A" and did so on the A-40 and other aircraft. Now, however, they have reverted to the traditional "Be" in honor of the founder of this Special Design Bureau.

Work on the A-50 proceeded very fast, even though the engineers encountered a huge pile of unfamiliar problems. Suffice it to say that over 70 antennas of various types had to be mounted on the aircraft in a way that

would preclude their interaction with one another. The structure of the Il-76T needed to be reinforced, because a small auxiliary motor had been placed in the back compartment of the fuselage and some of the equipment for navigation by pilotage had been altered. For determining the best location for the antenna of the main radar set, a 10 m in diameter one with a rotodome, it was necessary to perform numerous tests involving the use of several airborne laboratories.

The first experimental A-50 aircraft was launched in 1980. It was delivered to the military after having been thoroughly factory tested for a whole year. Their specialists made many important changes and corrections, their aim being to release the new Russian AWACS as soon as possible for series production. This happened two years later and in 1984 the military placed A-50 units on active duty.

What are the capabilities of the A-50, in what respect is it superior to the Tu-126, and how does it differ from the E-3A? The "Shmel" system differs from the "Liyana" system on the Tu-126 aircraft first of all by featuring a powerful high-coherence pulse-Doppler radar antenna, digital data processing for guidance of

fighter aircraft, and communication links with other aircraft as well as ground stations, also via satellite. The system has equipment for monitoring and recording acquired data, for digital display of observed scenes, and for monitoring its overall performance. The aircraft, with a maximum takeoff weight of 190 tons, has a reconnaissance range beyond 1000 km and can fly four hours without refueling. Its crew consists of five pilots and mechanics, also ten members of an reconnaissance system operating team.

The A-50 is foremost a reconnaissance system but can, with an additional team of appropriately trained officers, become an airborne command post. In order to improve its effectiveness as such, most functions pertaining to guidance of fighter aircraft toward identified targets have been automated. Its theoretical continuous-flight time has been lengthened by equipping it with a system of in-flight refueling from a flying Il-78 tanker.

With respect to a few performance characteristics such as target detection range and number of automated guidance channels the A-50 aircraft is inferior to the American E-3A, but with respect to others such target

A-50 Aircraft in Flight above the Clouds: photo by Sergey Skrynnikov



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discrimination under conditions of strong interference and ground clutter it excels the latter. Also its communication systems are more proficient, especially when retransmitting information to ground stations via satellite (initially the E-3A did not have this capability). Its transmission range is up to 350 km with metric or decimetric waves, up to 2000 km with short waves, and almost unlimited via satellite.

Radar Antenna of "Shmel" System Mounted on A-50 Aircraft: photo by Sergey Skrynnikov



By the end of the nineteen eighties there was already a sufficient number of A-50 aircraft available for equipping the CIS Air Defenses and thus appreciably improving their effectiveness. However, during their actual operation there were discovered many shortcomings largely traceable to the specific ways in which USSR state programs had been carried out. For a long time they could not finalize the design of the in-flight refueling system, which significantly limited the combat capability of the aircraft. Most responsible for this was the change of aerodynamic characteristics caused by the presence of a large radome. Turbulence created by the tanker aircraft made it practically impossible to have the sonde touch the power supply terminal. Despite unsuccessful attempts to solve this problem while the A-50 was being tested, some units have been equipped with refueling facilities while both Beriyev and Ilyushin Special Design Bureaus are continuing their work on improvement of the aircraft.

The economic conditions in present Russia preclude the appearance there of any entirely new AWACS designs in the near future and the basic trend of in this area will be to modernize the A-50 (just what the Americans are doing with their E-3A). Improvement of the carrier aircraft characteristics - an experimental model of the Il-76MF transport aircraft with longer fuselage and PS-90 higher-thrust engines is already being built - will make it possible to increase the fuel capacity and to add equipment on deck.

It is worth recalling another historic event related to the A-50. At the Aviation Day Show in Zhukovskiy on the banks of the Moscow River, some time at the end of the nineteen eighties, many of the spectators including foreigners could see several Il-76 aircraft with a "mushroom" antenna above the fuselage and large radomes on the tips of the wings. Through binoculars or a telephoto lens they could even read the number 976 on the fuselages. Most of the spectators thought they were seeing Russian AWACS aircraft which, while still held secret inside the country, were already known to them from articles in the Western press. Only specialists recognized, however, that the "unknown" aircraft was really the civil AWACS variant SKIP (Samolotniy Komandno-Izmeritelnyy Punkt [Airborne Flight Measurement and Command Post]) used in Hangar (?) L II in Zhukovskiy for various measurements during aircraft flight testing. Just as was the A-50 aircraft, so was the "976" for the first time officially displayed for the general public at the '92 Moscow Air Show (the A-50 had been demonstrated earlier, together with the Tu-160 and other aircraft, to the U.S. Secretary of Defense Frank Carlucci).

'Small' AWACS

Mindful of known American experiences and their own estimate of requirements considering the perpetual possibility of entanglement in local wars, the USSR Government decided to add a surveillance aircraft with a short-range radar to its Armed Forces. At that time the Antonov Special Design Bureau was working at full steam on modernization of the An-72 short takeoff and landing aircraft, already well known for having been extensively tested under extreme atmospheric conditions. Also several variants of this aircraft were being worked on: the An-72 Patroller, the An-74 Polar, and others. One of them, the An-71, was selected for installation of the reconnaissance radar system. Its selection was based on a performance analysis and a comparison with potential competitors designed in other Special Design Bureaus. Although it has not yet been officially confirmed that the An-71 is intended for military purposes (the engineers claim that it will be used exclusively for air traffic control), it is well known that Aeroflot would not be able to afford it if it had not been purchased by the military.

The small An-72 gave the engineers many problems: finding place for equipment and personnel, ensuring adequate electromagnetic isolation between individual devices and antennas, and adequate cooling of most heavily loaded system components. Most difficult was, however, placing the antenna of the main radar set where it would remain stable and its orientation controllable. The engineers came finally up with a very ingenious solution: they placed the antenna above the vertical rudder, after they had modified the shape of

"976" Airborne Flight Measurement and Command Post: photo by Yefim Gordon)



this rudder by altering its surface and changing its slope to a negative one so as to maintain a proper balance of the aircraft's weight distribution. At the same time they also modified the shape of the horizontal rudders and placed them directly above the fuselage, inside which they had mounted a small auxiliary drive motor.

The An-71, with the traditional Aeroflot decoration (many special-purpose aircraft in the former USSR were and still are flying under Aeroflot colors), passed factory tests and was then demonstrated to the Government authorities including Mikhail Gorbachev at the exhibition of Antonov Special Design Bureau accomplishments. Later in the summer of 1988 this aircraft was together with other prototypes intended for military ordnance sent to the secret exhibit in Kubinka. As had happened to many other types of armament, however, the A-71 development program was terminated and today this aircraft is not likely to find any military or civilian application.

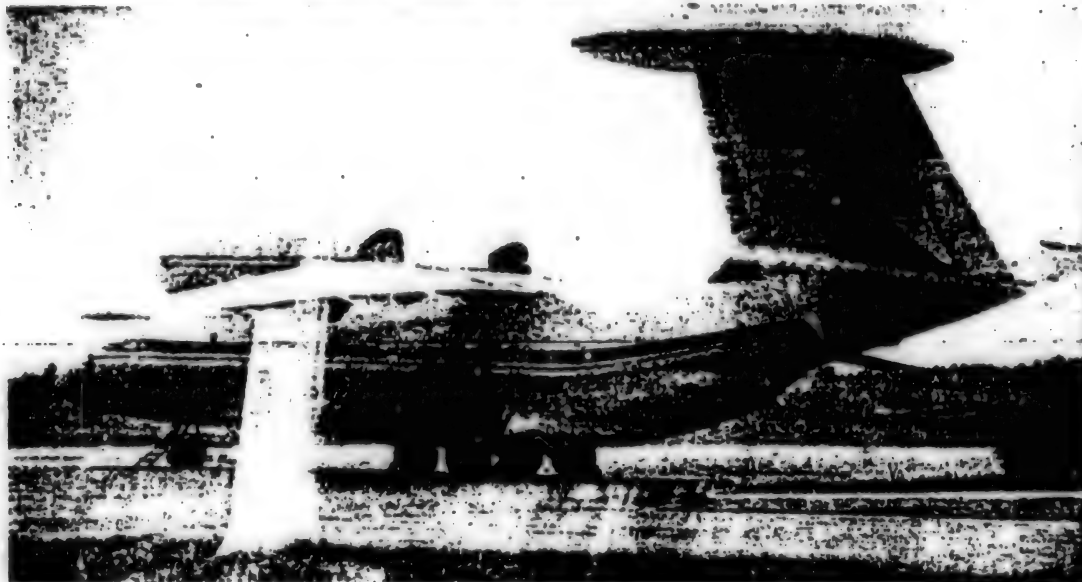
Before writing more about the An-71, let us recall one of the curious events relating to it. The first photograph ever taken of this aircraft was, it seems, found not as usually in the Western press but in a USSR publication. A consequence of this oversight by the censors was that the fragment of the unique An-72 tail unit with the radome of the radar antenna above as seen on the TASS photograph next to Gorbachev engaged in a conversation with Balabuyev, chief designer at the Antonov Special Design Bureau, appeared also in the Aviaexport advertising brochure.



One of several photographs of An-71 aircraft in flight: photo by Viktor Drushlyakov

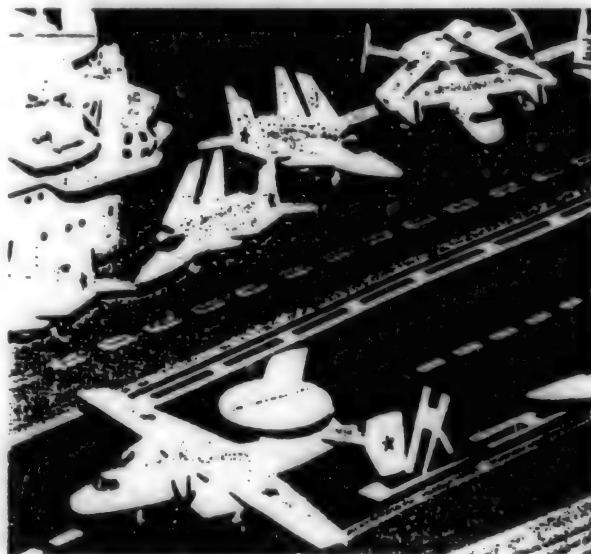
Carrier Borne AWACS

The program developed in the nineteen eighties for construction of heavy nuclear carrier aircraft necessarily included also development of a carrier borne reconnaissance and command aircraft. This aircraft must be small and have collapsible wings, also have sufficient lift capacity and a very short takeoff and landing ability. None of the existing aircraft met these requirements and, therefore, a contest for a new one was announced. Four Design Bureaus entered the competition: The Antonov Special Design Bureau with its An-75 design, the Beriyev Special Design Bureau with its P-42 design (same designation as that of the record making Su-27 variant), the Yakovlev Special Design Bureau with its Yak-44 design, and the Myasischev Special Design Bureau. The designers of the

An-71 Aircraft during Preparation for Test Flight: photo from authors' archives

Antonov An-71 were not able to design a carrier borne variant of that aircraft, because of the aerodynamic structure already in place. Although the dimensions of its fuselage and its takeoff weight completely satisfied the requirements, it was not possible to change the wings located under the engines into collapsible. It was the "Skorost" Special Design Bureau, known for its Yak-44 vertical takeoff and landing aircraft (the only such aircraft series produced in the USSR) for its experience in construction of carrier borne aircraft, which decided to take the simplest route: to copy the American carrier borne Hawkeye AWACS. Work on the Yak-44 was being done in the middle nineteen eighties. In the fall of 1984 they developed the technical specifications, envisioning an aircraft able to fly for 3.5 hours within a radius not shorter than 300 km from the carrier deck. The Yak-44, designed to these specifications, had two turboprop engines, collapsible wings, and three vertical rudders. The antenna was mounted conventionally, on supports above the fuselage. A model of the Yak-44 could be seen among those of other aircraft on the deck of the mockup Air Force cruiser at the '92 Moscow Aero Show. Unfortunately, it was not possible to compare the model with the actual prototype. Development of this aircraft terminated after construction of a full-size mockup, its fate thus being similar to that of the An-71. There was not enough money for further design work (the same happened to the Yak-141 aircraft from the "Skorost" Special Design Bureau.

It is alas not possible to write more about all the Russian AWACS aircraft. The designs of many of them have been filed in the archives of the Design Bureaus and are not expected to be published soon. As is well known, aircraft abundantly furnished with most modern electronics are among the most guarded secrets of every military establishment. This was and is true in Russian too.

Model of Yak-44 among Other Carrier Borne Aircraft at '92 Moscow Aero Show: photo by Wojtek Matusiak

Technical Specifications of the Su-30MK

95UM0048A Moscow KRASNAYA ZVEZDA in Russian
22 Oct 94 p 5

[Article by KRASNAYA ZVEZDA Correspondent Valentin Rudenko, under the rubric: "Arsenal": "The Su-30MK: Long-Range Target Interceptor"]

[FBIS Translated Text] There are few combat aircraft like the Su-30MK in the world that could have gained such recognition and prestige in such a short period of time. Displayed at the Abu Dhabi Air Show for the first time last year, it does not cease to amaze the aviation world with its increasingly new capabilities. For example, the Su-30MK flew across the ocean under its own power to an arms exhibition in Chile, which in and of itself was a sensation. And, with a full combat load on board consisting of more than seven tonnes of missile-bomb weapons, our fighter-interceptor demonstrated head-spinning aerobatics at the recent Farnborough-94 Air Show, which was conducted in Great Britain. Even competitors were forced to admit that right now there simply is no similar aircraft in the West.

The Su-30MK fighter-interceptor aircraft was developed at the "OKB Sukhoi" [Sukhoi Experimental Design Bureau] ANPK [Aircraft Scientific Production Combine] under the leadership of General Designer Mikhail Simonov based upon the well-known Su-27UB combat trainer aircraft. The aircraft has turned out to be unique. Suffice it so say that this aircraft is capable of carrying out a combat patrol in the air for ten hours without landing and, after that, can inflict destructive strikes against the most varied airborne, land-based or naval targets.

"We had to equip the aircraft with an aerial refueling system and also modernize many aircraft components and systems to so substantially increase the flight time and range," said Chief Designer Igor Yemelyakov. "The result has exceeded expectations. Suffice it to say that Test Pilots Nikolay Sadovnikov and Igor Votintsev carried out a sortie without landing from Moscow to Komsomolsk-na-Amur and back in one test flight, covering a distance of more than 14,000 kilometers in 15 hours and one minute. Indeed, later, after consultations with scientists and doctors, they decided to restrict the time of the aircraft's stay in the air to 10 hours."

You will agree that 10 hours is also quite a lot. Especially if you consider that in the process the crew, which consists of two pilots, has to not only fly the aircraft but also monitor the air situation and fight if necessary. Both cockpits on the Su-30MK are completely identical, both from the point of view of controlling the aircraft and also controlling weapons, so that the pilots can relieve each other in flight.

The new fighter-interceptor has an integral aerodynamic layout, fly-by-wire control, automatically deflecting mechanization of the wing leading and trailing edges, and a number of other systems that ensure reliable and stable operation of the engines, flight-navigation system, and onboard weapons. The Su-30MK's navigation system permits carrying out flight practically in any region of the world. Titanium alloys and composite materials were widely utilized in the aircraft design. The two A.M. Lyulki-designed AL-31F turbojet bypass engines installed on the aircraft have an aircraft thrust to weight ratio of more than one which provides the aircraft's high thrust-to-weight ratio.

The Su-30MK completely preserved the flying qualities of its predecessor and significantly exceeds its combat effectiveness through the installation of new types of missiles and weapons control systems. In contrast to the Su-27, this is already a multi-mission fighter-interceptor. Experts maintain that the Su-30MK has no equivalents in the West. It is difficult to even compare it to any specific aircraft because it alone is capable of accomplishing the missions that the F-15 fighter, F-15B fighter bomber, A-10 ground attack aircraft and F-111 bomber can.

The Su-30MK's primary mission is the interception of airborne targets at long ranges. It can also be successfully utilized to conduct strikes against land-based and naval targets. To do that, its arsenal contains the most modern air-to-air and air-to-surface weapons.

"The Su-30MK carries a payload of up to eight tonnes," said Viktor Galushko, who is responsible for developing this aircraft's weapons system. "The aircraft has 12 suspension points and guided missiles can be suspended from 10 of them. R-27, R-72 or R-77 all-aspect angle guided missiles with radar and infrared guidance heads are utilized while operating against airborne targets. Kh-31P antiradiation missiles, Kh-25LD, Kh-29L and Kh-29T missiles with television and laser guidance, Kh-59M cruise missiles with television guidance, conventional aircraft bombs, and also KAB-500 guided bombs and aircraft unguided rockets are utilized to destroy land-based and naval targets. Furthermore, a GSh-301 standard aircraft cannon with a basic load of 150 rounds has been installed on the aircraft."

The weapons control system consists of a powerful pulse-Doppler jam-proof radar that permits the conduct of target search and tracking against the background of the earth and an optical-electronic radar with a helmet-mounted target designation system. The Su-30MK can also be utilized as an airborne command post.

Work continues to modernize the Su-30MK.

Flight-Technical Specifications of the Su-30MK

Take-off weight, normal, kg	25,000
Maximum	34,000
Maximum flight speed, Mach	2
Flight range, km	
Without aerial refueling	3,000
With one aerial refueling	5,200
With two aerial refuelings	6,990
Maximum operational G-load	9
Take-off thrust-to-weight ratio	1.1
Service ceiling, meters	Over 18,000
Thrust of AL-31F turbojet engines, kg	2 X 12,500
Length of take-off/landing run, meters	550/650

Be-12 Converted to Fight Forest Fires

95UM0048B Moscow KRASNAYA ZVEZDA
in Russian 22 Oct 94 p 4

[Article by Viktor Ponamarev, deputy general designer of TANTK [Taganrog Aviation Scientific-Technical Complex] imeni G.M. Beriyeu, under the rubric: "Conversion": "Peaceful Profession of a Combat Amphibian"]

[FBIS Translated Text] Within the framework of conversion, the collective of the Taganrog Aviation Scientific-Technical Complex imeni G.M. Beriyeu (TANTK) has developed the Be-12P aircraft to extinguish forest fires based on the Be-12 combat amphibian. The administration of Irkutsk Oblast and Russia's Federal Forestry Management Service provided financing for the work.

The modified amphibian is capable of gathering water in its six cubic meter tanks in 25-30 seconds and can effectively extinguish fires at a range of up to 60-70 km from the reservoir.

The experience of employing three aircraft while extinguishing forest fires in Irkutsk and Rostov oblasts, in Chukotka and in the area of Yalta and other areas convincingly demonstrated their indisputable superiority in contrast to "land-based" aircraft which are refueled with water at airfields where, as experience has shown, there simply isn't the required quantity of water to fight a fire.

The record productivity of one Be-12P aircraft was achieved while extinguishing fires near the village of Listvyanka in Baykal on July 13, 1993. At that time,

252 tonnes of water were dropped on fires during two aircraft sorties. In the process, 11 tonnes of water were dropped during one hour of flight and 33 tonnes of water were dropped per tonne of fuel consumed.

A Be-12P aircraft conducted the drop of 172 tonnes of water and put out three fires while extinguishing fires in the area of the city of Gelendzhik on August 15, 1994. Effective interference in combating forest fires in rest facility and sanatoria areas permitted the prevention of the ignition of buildings and eliminated a threat to peoples' lives.

Clearly three aircraft are not resolving the problem of combating fires. Therefore, Russian Federation Government Decree No 620 "On Combating Forest Fires" that was adopted on June 1, 1994 provides for the transfer of another eight aircraft from Naval Aviation in 1994 and their reequipping for these purposes. So far they haven't been able to obtain the money from the Ministry of Finance and Ministry of the Economy line but they do need to resolve this question immediately because reequipping the aircraft will last no less than six months.

Besides the practical significance for extinguishing fires, the Be-12P's work on fires has great significance for TANTK because it permits them to develop the methodology for collecting water and extinguishing fires and also the requirements for the infrastructure of reservoirs from which take-offs and landings take place and many other things. Furthermore, the design solutions of the special fire extinguishing system are being assessed which will be taken into account in the design of the Be-200 special aircraft-amphibian for extinguishing fires that has been developed by TANTK jointly with Irkutsk Aircraft Production Association.

NAVAL FORCES

Pacific Fleet Commander Khmelnov Interviewed

MM0111140794 Moscow KRASNAYA ZVEZDA
in Russian 21 Oct 94 p 2

[Interview with Admiral Igor Khmelnov, newly appointed commander of the Pacific Fleet, by Nikolay Litkovets; date and place not given: "I Shall Not Idealize the Situation"—first paragraph is introduction]

[FBIS Translated Text] There is no particular need to introduce the new commander of the Pacific Fleet to members of the Pacific Fleet: He has been "his own" man here for some time. Igor Nikolayevich Khmelnov has also attracted the attention of the press, particularly in connection with events on Russkiy Island and the elimination of the consequences of the fire at depots in Novomezhin. However, this is the first time that he has appeared before readers in his new capacity and the first time that he has presented the fleet for an end-of-training-period performance evaluation.

[Litkovets] Igor Nikolayevich, how do you rate the fleet's present condition?

[Khmelnov] The Pacific Fleet is going through quite a difficult period, and the most serious problem for us is still inadequate, erratic financing. For example, no more than 30 percent of the fleet's financial needs have been met every month so far this year. Most of the money is used to pay for the servicemen's upkeep and wages due to workers and employees, while ship repairs, housing construction, and other important programs are financed with what is left over. This in turn increases social tension in military collectives and in servicemen's families. However, most members of the Pacific Fleet remain confident that these difficulties are only temporary. As long as there is this confidence, everyone can concentrate on the main task of keeping our forces at the prescribed levels of readiness. The combat service plan is being met: The nuclear submarine cruiser under the command of Captain First Rank S. Yarkin has successfully performed its combat task at sea; the crew of the nuclear submarine under the command of Captain First Rank V. Rybalko has done some excellent work in the ocean; and this year the Pacific Fleet took part in joint exercises to assist those in distress on land and at sea, together with the U.S. Navy and Japan's Coast Guard Forces. Our ships were involved in the Putina-94 and Zaslon operations; and our personnel demonstrated a high level of training and coordination when assisting the civilian population hit by floods in Maritime Kray and the earthquake in the Kurils. So I can say with a clear conscience that Russia's Pacific Fleet meets the demands made of it. Moreover, it now has special status. Let me tell you why.

Since the breakup of the USSR, Russia has essentially been left with only two main maritime outlets to the international market: In the north and via the Far East. If these regions and communication lines are to operate efficiently, their protection and security must be guaranteed. This has become one of the Pacific Fleet's main tasks and offers a timely response to the dozens of piratical attacks on Russian vessels which occurred in 1993 (in three cases, the vessels came under fire from grenade launchers and automatic weapons) and to the destructive plundering of the Far East's maritime resources by all who wish to profit at Russia's expense.

So the Pacific Fleet is not simply an expensive symbol of Russian statehood: It is an instrument of policy of very practical significance. The forces of the Far East Military District and Border Guard Troops work with the fleet to protect our country's Far Eastern borders. We all individually perform specific tasks and functions peculiar to us alone. Together we represent a real force capable of reliably protecting the sovereignty and territorial integrity of the Russian Federation and the inviolability of its maritime and land borders in the east.

[Litkovets] But recently the press has raised not so much these questions as the problems of Russkiy Island, sadly renowned throughout Russia. Will disaster not strike there again?

[Khmelnov] I personally take a positive view of attempts by the mass media to raise the fleet's serious problems for judgement by public opinion. But there is another side to the coin. Some journalists who set themselves up as "champions of justice" are evidently meeting the social demands of circles that would like to see the military leave Russkiy Island. Hence references to "the military's inability to ensure the vital activity of units stationed there." This is not true. With support from the Defense Ministry and the Russian Navy's Main Staff, we have managed to carry out much restoration and repair work, cadre organization, and preventive medicine measures in trainee subunits since the tragic incident. I can now firmly say that the situation there is back to normal and living conditions meet the requirements of service regulations. My conclusion has been backed up by two recent commissions from Moscow. Preparations for winter are now moving full steam ahead in trainee subunits: All boiler houses have been repaired, coal is being delivered, and heating systems are being prepared and checked. There has also been a drop in the sick rate among personnel serving on Russkiy Island: As far as infectious diseases are concerned, 8.6 times less people are falling ill in subunits as a whole and 15.7 times less in trainee units.

However, I would not idealize the situation. The position with materials and equipment at unit medical

centers on Russkiy Island still leaves much to be desired; some of them require maintenance work or a major overhaul; and repair work at the naval hospital has been delayed.

[Litkovets] As far as I am aware, even taking account of this year's military school graduates, the fleet will be able to meet less than 50 percent of manpower requirements in lower-ranking naval units. Is it not possible that the Pacific Fleet will be so short of cadres in a year or two that ships will have to be manned on the basis of the principle "every little helps" in order to put to sea?

[Khmelnov] There is no danger of that at present, but the problem of recruiting officers to the fleet remains serious. We must admit that the prestige of our service is still low, particularly here, in Russia's Far East. The reasons are the pay, which does not correspond to the work input; the poor living standards; and the special conditions of service. Consequently, it is very hard to hold onto a lieutenant who, thanks to the training and education he has received at military school, can easily find himself a job in various organizations, commercial structures included, where the working day begins at 0900 hours and ends at 1800 hours and the pay is several times higher than that of an officer. Every year, 16 percent of military school graduates who join the fleet are transferred to the reserve. Manning levels in lower-ranking naval posts in the Pacific Fleet, including military school graduates and reserve officers drafted for two years and accepted on a contract basis, make up 60-65 percent of total requirements. But, I must stress once again, at present the number of young officers serving on our ships allows us to ensure that all tasks are performed.

[Litkovets] Igor Nikolayevich, what priorities have you mapped out in your work to keep the fleet as a strong military structure?

[Khmelnov] The main priority today is to hang on to people and to prevent any break in cadre continuity.

Impact of Cutbacks on Shipbuilding, Naval Support Activities

95UM0040A Moscow KRASNAYA ZVEZDA in Russian 7 Oct 94 p 2

[Article by Vladimir Maryukha: "Seamen on the Volga: Like Repin's Barge Haulers, They Are 'Towing' the Naval Trains to Sea"]

[FBIS Translated Text] Few know that the zone of responsibility of the navy is not limited to the seas and oceans bathing Russian shores. There are naval units on the inland waterways as well, and their missions are sometimes no less serious than those of seamen on alert duty. And in view of the unique features of the "river"

service of the seamen, their problems do not always fit in the Procrustean bed of general naval woes.

Our correspondent visited one such unit, located in the very center of Russia.

'Load the Fuel in Barrels'

The send-off given to the river train was totally unlike that a train on land might get. And, continuing with the analogy from that popular song, not even like that of steamships. After all, this naval train, traveling through Nizhniy Novgorod to the sea, essentially consists of a building dock with a new ship resting in its womb, support tugs, other vessels, and a large number of attached personnel (in other words people who are necessary but are not foreseen by the establishment). And along the route preparations will have to be made for the train to negotiate the numerous locks, changes in river depth will have to be accounted for, and concern will have to be shown for the reserves of fuel, food and water. If we consider that besides trains in transit, Nizhniy Novgorod also sends off its own trains carrying naval orders, the load borne by the almost 30 officers of the submarine construction and repair brigade will not seem that light. As for the intensity of their service, judge for yourselves. The year was 1989: Forty-seven trains in transit (that's 11 tonnes of food, 290 tonnes of water, 176 tonnes of POL [petroleum, oil, and lubricates], part of which had to be loaded by senior officers—captains 1st and 2d rank—together with warrant officers and civilian personnel in 200-kilogram barrels because of problems with a tanker). Add to this the four submarines, two tugs, a demagnetizing vessel, five pontoon modules and three panel targets from Nizhniy Novgorod and from plants in Gorokhovets, Gorodets and Bor. And these are only the largest shipments.

For brigade chief-of-staff Captain 1st Rank Vladimir Kachanov 1989 is indicative in that it coincided with the beginning of his service in Nizhniy Novgorod, and was the busiest shipping year thus far. As the economic situation in the country worsened, the flow of naval orders grew rarer. Last year there were only 12 passing trains, while this year the crew of the last diesel submarine left, and only to prepare the submarine for resale and export. But this does not mean that the region has exhausted its possibilities, or that the brigade has no more missions on the Volga.

Military Representative—Division—Brigade—?...

Rear Admiral Gennadiy Yakovlev gave 28 years to the navy, 23 of them in a submarine, commanding a submarine division on the Pacific.

"When I was transferred this summer to Nizhniy Novgorod I thought that I would be doing great things

for the navy—building new ships and submarines together with the plant workers. But as it turns out, my role will be to preside at the funeral of this enterprise," Gennadiy Stanislavich told me bitterly about his few weeks and months in the position of brigade commander and senior naval chief of Nizhniy Novgorod.

The Krasnoye Sormovo Plant began building submarines back in the 1930s. And there was only one military representative at the plant at that time. How he managed to do everything is difficult to say today. But by 1946 an entire division was working here, receiving the new generation of submarines and checking on fulfillment of other naval orders, while another 6 years later it was up to brigade strength. In addition to running the trials and supervising deliveries of military equipment for the navy, the brigade interacts today with central depots—communications, motor vehicle and technical, and maintains contact with a dozen and a half military representatives, design offices and production associations and plants.

"For practical purposes work on naval orders has been stopped only at Krasnoye Sormovo," said Captain 1st Rank Aleksandr Kozlovskiy, the brigade deputy commander for electromechanical service. "At other enterprises only the final building schedules have been changed due to the absence of financing."

At the Bor plant a panel target is standing 90 percent finished for its second year, and two heavy moorings are 94 and 64 percent finished, while in Gorodets a depot ship is waiting for construction to end. You must agree that this isn't "shooting" equipment, but without it, the navy will grind to a halt just as certainly as without new warships. Although they are not working on these objects any longer, what has been finished needs to be protected, after all.

In addition to technical tasks, there are other ones as well. For example bringing in supplies for the naval trains. Technical gear for watercraft are delivered by the brigade's own transport from Kronshtadt, 1,200 km away, emergency rescue resources are brought in from Vologda (750 km), medical equipment is brought in from Kimr (530 km), deck gear is brought in from Dmitrov (460 km) and so on. Prior to 1991 the brigade was a retraining base for naval reserve officers—commanders, executive officers and mechanics of surface ships and submarines.

But from the first of October of this year, in the words of Gennadiy Yakovlev, the brigade once again returned to division strength. Fewer orders were coming in, the demand for "barge haulers" disappeared, and so they reduced the manning. But this reduction, if we delve a little deeper, doesn't solve the accumulated problems—on the contrary, it creates new ones.

The People Are No Longer Weeping

In a certain Eastern parable, a ruler exacted increasingly harsher taxes from his subjects, until such time that the people were laughing, because they had nothing left but laughter. In the brigade, no one is grumbling about its fate because there's simply nothing left to lose. Ten staff officers wrote applications requesting retirement into the reserves in connection with the change in organization and manning. The others will also have to be "removed," including the brigade commander. It is "not authorized" for a captain 1st rank to occupy a captain 3d rank's position, and for an admiral to occupy a 1st or 2d rank position.

The flag-officer specialists came to the brigade after the academy, and they had enormous experience serving in submarines and on the staffs of large combined fighting units. Now captain lieutenants who have barely mastered their work as combat unit commanders will have to be brought in from the fleets. In the division they will have gone as high as they can go—the fleets simply won't need captains 3d rank any more. And I'm sure there's no need to explain how an officer without a future serves.

It would have been enough if as a result of the reductions one officer would be doing the job of two (the tasks of the division could be handled by a brigade), and if they hadn't cut the pay, so as to at least materially compensate for the loss in opportunities in career advancement. But no, even the pay will be several steps lower in the division. The division will essentially have to be established anew, and this, besides everything else, will jack up social tension one more notch. After all, even at brigade strength an admiral, for example, had no better chance of getting housing than a homeless warrant officer. And the 120-apartment house which five units had started building as a joint effort, will have to be divided among such a large number of applicants, assuming it is finished someday, that the brigade-division will not be able to do anything for officers retiring into the reserve.

The Nizhniy Novgorod brigade has one other purpose that may be termed exceptional. It has long been the home of a training center providing training to the crews of diesel submarines under construction. Given the problems of centers for the training of nuclear-powered submariners, diesel submariners have generally been forgotten. But whoever said that serving aboard a diesel submarine is any less dangerous than in nuclear-powered ones? Underwater navigation is itself a factor of higher risk. And to eliminate Russia's only center training submariners for diesel submarines, the center where they first come together as crews, would be equivalent to doing away with the last two

remaining nuclear-powered submarine training centers. The chief-of-staff related to me with bitter humor how the personnel department "solved" the problem of undermanning of diesel submarine crews—they filled the seagoing warrant officer positions with shore-based warrant officers from the tank forces. Tanks and submarines both have hatches, they reasoned, so these tankmen should be able to sort things out. Fine crew this would be at sea.

Together with this center, there should also be another—a center for diesel submarine construction, similar to the nuclear-powered center already existing at Severodvinsk. But this is a topic of separate discussion. In the meantime the amount of money that has been allocated for repairs on the training center, which in past years used to train up to 14 crews, is not enough to whitewash the ceilings of a single story, and because he was so "unneeded," the center chief submitted an application for retirement into the reserves.

In Lieu of Prospects and an Epilogue

Having barely assumed his post, Rear Admiral Yakovlev is already certain that mountains could be moved with a staff such as his. And the ties that have already been established with the Nizhniy Novgorod administration and with enterprise directors must not be rended—at least they should be maintained at the attained level. In any tactical retreats, it is simply criminal to lose sight of the strategic goals. And there is but one strategy permissible here: Both today and in the future, Russia's security must be guaranteed not only by the readiness of military servicemen to fight and die at its borders, but also by the equipment of the army and navy. Moreover, this poverty isn't going to last forever, though no matter how poor we may get, under no circumstances can we leave the navy without ships, and all the more so without directions for future development of shipbuilding. And Nizhniy Novgorod has everything it needs for this: a unique procedure for building titanium submarine hulls, a unique operation building air-cushion assault landing ships and surface-effect vehicles, and Russia's sole operation producing submarine periscopes and submarine tubes.

Consequently the brigade should not be chopped into pieces—it should be left at least at its present strength. And still better, resources for the future should be sought. After all, military reform means not only reduction but also development of perhaps old but proven and extremely necessary organizations for the future. Were we to break the brigade's back today, won't we be biting our nails tomorrow, paying double and triple for something we could have preserved? Consider how many times such things have already happened, and consider how painful it is to see, for example, the Krasnoye Sormovo Plant, separated from

the brigade by only a fence, agonizing over such hasty decisions. And whether the Volga will be serviced by seamen, and not barge-haulers, is a decision that has to be made today.

REAR SERVICES, SUPPORT ISSUES

Col-Gen Klemin on Importance of Military Transport System

95UM00464 Moscow KRASNAYA ZVEZDA in Russian
18 Oct 94 p 2

[Article by Colonel General (Retired) Anatoliy Klemin under rubric "Russia's Interests": "Transport Is a Line in Military Doctrine"]

[FBIS Translated Text] *I agree that comparing the country's network of highways, railroads, and air and water communication routes with the circulatory system by this time sounds trite, but what can you do? In fact, any clogging of these arteries can lead to serious diseases of the country's economic and military organisms, and in the worst case even to total paralysis.*

KRASNAYA ZVEZDA has published many articles showing the importance of the transportation complex in accomplishing programs of military organizational development and the country's economic development. Colonel General (Retired) Anatoliy Klemin, who headed the USSR Ministry of Defense Central Military Transportation Directorate for many long years, shares his opinions on this question.

Military organizational development in Russia, processes occurring in the Army, and Army reform are linked directly with questions of improving the transportation complex. Establishing new troop groupings, bringing combat-effective formations and units up to full strength, withdrawing troops from the territory of other states, and reducing authorized personnel strength presume wide use of all kinds of transportation to support the redeployment of troops, delivery of weapons and equipment, and movement of servicemen and their families.

In the course of the ongoing reform, over 100,000 Russian servicemen and 5,000 items of arms and military equipment were withdrawn from the territory of other states in 1993 alone. Troop trains [voinskiy eshelon] used 12,300 railcars and military transport [voinskiy transport] used 47,700 railcars. Air transportation redeployed 45,600 persons and sea and river transportation redeployed 1,632 pieces of military equipment. The withdrawal of troops from Germany, Estonia and Latvia was completed this year, authorized personnel strength is being reduced, and Mobile Forces are being formed... Unquestionably, movements of that quantity of troops, arms and equipment required transportation departments and military transportation agencies to give full consideration to capabilities of all kinds of transportation, organize precise planning and perform well-coordinated work to support transport movements.

Once again there was confirmation of the enormous military importance of transportation and the need for coordinating actions of corresponding military and civilian transportation departments in developing both military strategy as well as kinds of transportation.

Meanwhile, appropriate economic and legal preconditions for reform of transportation with consideration of national defense needs still have not been created either in rail as well as other kinds of transportation. This is dictated in part by the state's profound economic crisis and in part also by insufficient attention given this problem.

Difficult times are being experienced by one of the most important kinds of transportation, rail, which continues to have the main proportion of military transport movements. By the way, other kinds of transportation also have ample problems. According to Ministry of Railways data, the chief indicator of any transportation sector—volume of freight hauls—has been reduced almost by a fourth here compared with last year. It is a paradox, but the level of profitability has risen to 16.2 percent under these conditions. Previously such a growth in profitability with such an avalanching drop in the volume of transport movements would have generated legitimate bewilderment. Where did such a discrepancy come from? Where did the profit come from? There are fully specific suppositions on this account. Today, when state financing does not support railroads' needs and when the sector's economy is subjected more and more often to various kinds of shocks, transport workers take advantage of any opportunity to survive. And they found "hidden reserves," as it is said, by reducing funds for repair and renewal of the fleet of rolling stock and railroad tracks and for development of the necessary infrastructure. It is not difficult to guess the consequences—all this inevitably will affect assurance of traffic safety and accident-free operation of equipment. One proof of this is the major railroad accident in Belgorod Oblast, which took the lives of 21 persons.

Of course, the death of people is a tragedy, but the fact is, the scale of a tragedy can vary. Let us assume for an instant that one of the participants in a railroad accident would be a train which included railcars with dangerous cargoes, or a military train with ammunition. The consequences can be truly catastrophic.

As we know, a railroad's economy is built on principles of cost-accounting and self-financing and on obtaining profit from the difference between mutual settlements with suppliers of products for railroads and the consumers of services it provides. But as of today the debt receivable is R3.5 trillion, i.e., the sector essentially is providing free services. It would appear that just being

paid back half of the debt will permit not only stabilizing the situation and improving technical support, but also fulfilling the social program. Unfortunately, collecting debts has become a problem in our time, although there are positive examples on Moscow Railroad, where consistent work is done to get the debt receivable paid.

The process of the country's transition to the sphere of new economic relationships affected the entire transportation complex. Today the state sector's proportion of all kinds of transportation except rail is only 37 percent. Unquestionably, this is creating new problems. Many newly formed transportation companies are deprived of significant state support by law and are in no condition to purchase new transportation equipment and maintain the necessary infrastructure. The accident rate in private companies is much higher than in the state sector. And each private transportation company and joint-stock company views military transport movements not in the context of measures of a mobilization nature, but as an opportunity to receive additional profit, which is fully explainable. In fact, while state transportation enterprises are guided by provisions of regulations of military transport movements and other regulatory documents in force in all kinds of transportation, the activity of joint-stock companies is regulated by articles of association, decisions of stockholder meetings, and legislative acts in force. And of course joint-stock companies, which by law are deprived of state financial support, are guided in their activity by one principle—obtaining profit in any way. The state transportation services have been suggesting more and more often lately that the regulations on military transport movements be revised and the established benefits eliminated... In this context a state program in the country's defense interests is extremely necessary. The "Transportation of Russia" program now is in the development stage. It will define basic directions for development of transportation. But military transportation personnel are bewildered by the fact that work on the program is being done without the involvement of military transportation service specialists and without full consideration for defense transportation requirements. Military doctrine gives priority to development of Military-Transport Aviation. This sector of course has to develop, otherwise the task of creating and developing the Mobile Forces cannot be accomplished. But in the near future the shortage of material and financial resources most likely will hamper fulfillment of the program for renewing the Military-Transport Aviation air fleet and establishing the necessary infrastructure.

In the near term rail transportation will remain the leading kind of transportation fulfilling the main volume of military transport movements. Nevertheless, the "Transportation of Russia" program provides

for eliminating unprofitable sections of railroads and writing off 20,000 km of lines of communication which have used up their life; according to specialists' forecasts, this will lead to a reduction in the freight transport volume by more than a fourth and to a simultaneous reduction in density of railroads before the year 2000. It turns out that the military organizational development concept and concept for development of kinds of transportation are being worked out independently of each other as if on parallel planes. Eliminating militarily important albeit unprofitable sections of railroads on strategic axes will reduce troop mobility, hamper their movement to the necessary region in prescribed time periods, and reduce the capabilities for delivering heavy and large equipment and arms.

Before the program sees the light of day and begins to have practical effect, it is desirable to conduct a thorough, comprehensive study of all kinds of transportation with the involvement of specialists of all military transportation services and scientists of the Military Academy of Rear Services and Transportation, the Military Transportation Institute and transportation construction institutes. In my opinion, that is why the program of Basic Directions of State Policy in the Transportation Area for the Near Term is so important. Being developed by the Russian Ministry of Transport with the involvement of the Russian Federation Ministry of Defense Central Military Transportation Directorate, the program provides for coordinating transportation system development strategy with Russian military doctrine, and also provides for priority development of transportation facilities used in mopping up emergency situations. In addition, Russian Federation Ministry of Defense proposals for improving the survivability of transportation have been taken into account in federal transportation development programs, particularly in the Program for Revival of the Russian Merchant Fleet.

The process of creating and developing joint-stock and private transportation companies is not precluded; it will introduce sharpness to their mutual relations with the military department and to accomplishing tasks of the country's mobilization readiness. There already are preconditions for this today—the poor study of these questions by ministries and departments and imperfection of the legislative base. A fully specific structure—a Transportation Committee under the Russian Federation Security Council, creation of which appears necessary—could think about this. It is impossible to effectively resolve the questions raised without the close, prompt interworking of all entities controlling various kinds of Armed Forces transportation and transportation services. No small amount of transportation capacities may drop out of the mobilization

infrastructure if we do not think today about good coordination of future work in the interests of the country's defense.

Lt-Gen Sharlapov Reviews State of Signal Troops

954F0167A Moscow *NEZAVISIMAYA GAZETA*
in Russian 21 Oct 94 p 3

[Interview with Lieutenant-General Valeriy Sharlapov, chief of Signal Troops of the Ground Troops, by *NEZAVISIMAYA GAZETA* military analyst Nikolay Plotnikov on occasion of Signal Troops' 75th anniversary, date and place not specified, under rubric "The Army": "Valeriy Sharlapov: 'In Reducing Quantitatively, We Are Improving Qualitatively'"; photograph of Sharlapov included]

[FBIS Translated Text] Lieutenant General Valeriy Sharlapov was born in 1945. He completed Ryazan Military Signal School in 1965 and began serving in the troops in Turkestan Military District. He completed the Military Signal Academy with a gold medal in 1976. After the Academy he served in various command positions in the Group of Soviet Forces Germany and the Central Asian Military District. Then he taught at the Military Signal Academy for three years. Beginning in 1985, he was on the staff of the chief of USSR Armed Forces Signal Troops. Since 1990 he has been chief of Signal Troops of the Ground Troops.

[Sharlapov] The Signal Troops take their origin from the Civil War. Initially they consisted of work columns which supported construction and servicing of military communications lines. Formation of telegraph-telephone battalions, one for each division, began in 1920; by year's end 46 signal battalions, 143 signal companies, 12 signal squadrons and 159 signal teams were deployed as part of rifle and cavalry formations and units.

The accomplishments of military communicators in supporting command and control in battles in the vicinity of Lake Khasan, on the Khalkhin-Gol River, in the Great Patriotic War and during the Afghan events are well known.

With respect to the present, communications with Russian troops located in CIS hot spots and, in part, national economic management in these regions are being supported thanks to our officers and men.

[*NEZAVISIMAYA GAZETA*] The Russian Army reform envisages a reduction of units for which there is no peacetime need. Does this apply to the Signal Troops?

[Sharlapov] Without question, but in reducing quantitatively, the Signal Troops are improving qualitatively.

The Armed Forces leadership and the Ground Troops command element give paramount attention to their development. You can have the most supermodern missile systems, air defense weapons and attack aviation, but if the appropriate signal, order or instruction is not communicated on time, naturally there will not be the expected effect from them.

[NEZAVISIMAYA GAZETA] You speak of qualitative improvement, but people abroad, as well as in our country, by the way, speak of a lag in our communications equipment's characteristics behind foreign analogues...

[Sharlapov] In general, this talk is pointless. Both our own and foreign scientists and designers realize one and the same laws of physics, mathematics, chemistry and electrical engineering in development work. Yes, there are certain distinctions in design and dimensions. The development of digital equipment is proceeding somewhat ahead. The domestic industry now is capable of putting out the most modern equipment, but unfortunately there is no money.

During a recent joint exercise held at Totskoye, U.S. military people were surprised on seeing our radio equipment of the Arbalet system. They do not have such equipment. The system includes light, portable radio equipment possessing enormous functional capabilities and increased ECCM and antijam protection that provides radio communications throughout the band of the tactical command and control echelon. We have space communications equipment that is in no way inferior in characteristics to the most modern foreign analogues. This is mobile equipment with a small number of servicing personnel. But this already is yesterday's equipment. New equipment has been developed, but money is needed.

[NEZAVISIMAYA GAZETA] The draftee shortage is one of the most acute problems which the Armed Forces have encountered. In some units officers are forced to take up sentry posts for this reason. How is this problem being solved in the Signal Troops?

[Sharlapov] The Signal Troops are no exception, but in the Ground Troops we have dozens of fixed communications centers in which there no longer are any first-term servicemen. They have been replaced by servicewomen and contract soldiers. Today over 8,000 women serve in the Signal Troops of the Ground Troops. They are privates, warrant officers and officers. Experience has shown that good basic training and the command element's good attitude toward them as service personnel subsequently permit counting on their high return. Based on commanders' comments, the servicewomen are performing their duties professionally. In contrast to an 18-year-old lad,

perhaps without even any professional qualities, women already are deliberately entering military service. By the way, a large percentage of them have a higher technical education. We have a school where warrant officer training is being conducted for the fifth year now. This is approximately 50-60 persons annually. There are 40-45 percent with a higher education in each levy.

[NEZAVISIMAYA GAZETA] It is said there is no end to those wishing to study there.

[Sharlapov] This is really so. On the average, there are 12 applicants for each slot. Selection is very strict. We basically take those who already are performing duty in the Signal Troops. I must note that they are more conscientious in studies than certain male cadets.

[NEZAVISIMAYA GAZETA] What is the mood of officers and men today?

[Sharlapov] Not bad on the whole, but officers often have to perform uncharacteristic tasks due to a shortage of first-term servicemen and servicing personnel. Today all civilian personnel receive R50,000-60,000 each. Who will go work for such pay? And how can we live without a metalworker and sanitary engineer? Many of our units are independent garrisons, you know.

I am alarmed by the trend which has begun to appear, where middle-level officers and warrant officers who have served 20 years leave the Army. They reason approximately as follows: I have to have time to find a job while I am still young. And these are specifically those professionals whom we so want to have.

[NEZAVISIMAYA GAZETA] And how are things with junior officers?

[Sharlapov] The situation with them has stabilized somewhat. With a good attitude of the command element toward them, young officers try to serve well. Among them are many intelligent lads fanatically in love with their job. They invent those things which previously would have taken decades to come up with. We have a space communications junction center accommodated on five vehicles. Skilled craftsmen of Transbaykal and Far Eastern military districts made it on one vehicle with essentially the very same parameters and capabilities. The mission now can be performed by only three persons instead of fifteen.

Competition for entering military signal schools continues to be high. The question now is about something else—the quality of training for school graduates has dropped very sharply, making it quite difficult for them to master the higher military school program. In my view, they are somewhat in a hurry to reorganize

the higher school. The transition to a five-year training program perhaps is justified, only not now. The approach to education must be differentiated, because far from everyone is capable of mastering one and the same program.

But let us not speak further about problems on the eve of the jubilee date. Taking advantage of the occasion, I would like to congratulate our veterans, military communicators of the Ground Troops, colleagues in other branches of the Armed Forces, their families, scientists, designers and defense enterprise workers on the Signal Troops' 75th anniversary and wish our excellent people all the very best.

Capabilities, Specifications of An-70 Cargo Aircraft

95UM0037A Moscow KRYLYA RODINY in Russian
No 8, Aug 94 (Signed to press 12 Jul 94) pp 7-9

[Article by Valeriy Roman: "The New An-70 Antonov 'Truck'"]

[FBIS Translated Text] A new aircraft of the Antonov firm was rolled out of the assembly shop in Kiev on 20 January 1994. In a triumphant ceremony the presidents of Ukraine and Kazakhstan cut a ribbon and cracked the traditional bottle of champagne against its side, blessing the skyward journey of the An-70T—a medium transport aircraft of a new generation. Three air force commanders—of Ukraine, Russia and Uzbekistan—expressed their wishes to see it "beneath their pennants" as soon as possible.

Not every airplane attracts such a representative audience. But the An-70 is special. Given successful realization of its potentials, it will be a qualitative leap forward in three areas all at once—airlift effectiveness, aviation technology, and aircraft engine building.

All contemporary medium transport airplanes, be they the An-12, the C-130 Hercules or the C-160 Transall, were developed back in the 1950s, and they have now become hopelessly obsolete and worn out, as the experience of local conflicts shows, in the tactical aspect as well. The nature of use of armed forces changed in recent years. Modern armies are transforming more and more noticeably into small but highly professional, well equipped "firefighting teams," the principal mission of which is to react quickly to arising centers of tension ranging from regional military conflicts to natural disasters. Consequently their mobility could be provided for only by unique "four-wheel-drive aircraft" capable of delivering the entire "assortment" of military equipment to the needed area and unloading it quickly on hastily prepared ground.

Back in the 1970s an airplane of this type was developed in the United States (the AMST project). The EUROFLAG consortium of European firms is working on the FLA airplane. But as of today Devis-Montan's AMST is only in its initial phase of creation. The FLA is on the drawing boards of the designers, while the Ukrainian airplane has been built and is being readied for flight tests.

The path of the An-70's creation was unusual. It would be sufficient to say that this is the first airplane in the CIS that is designed almost completely on computer screens. The assembly stage was also simulated on them. This made it possible to exclude the molding phase of adjusting parts and units, and guaranteed high assembly quality.

The An-70 was designed in the Aviation Scientific-Technical Complex imeni O. K. Antonov as a replacement for the An-12. It is intended to be used primarily as a medium transport airplane. It can carry cargo weighing 30-35 tonnes over a distance of 4,000-5,000 km at a speed of 750-800 km/hr.

The transport possibilities of the An-70 are extremely impressive. The wide, high cargo space can accommodate 98 percent of all models of modern combat equipment possessed by CIS and NATO countries! The volume of the cargo space is 370 m³, which is three times more than the An-12, C-130 or C-160, and 35 percent more than the Il-76. Cargo weighing up to 5 tonnes can even be placed on the dropping ramp. Such that the airplane can take an undismantled 152-mm 2S3 self-propelled gun (or a 155-mm American M-109), an infantry fighting vehicle or a surface-to-air missile system aboard.

Owing to a fundamentally new propulsion plant consisting of four 14,000 horsepower D-27 turboprop ducted-fan engines manufactured by the Motor-Sich firm (in the city of Zaporozhye), employed for the first time in the world on a transport airplane, the An-70 is not only able to fly at a high cruising speed (equal for example to the speed of the Il-76 jet and exceeding by 30 percent the speed of the An-12, C-130 and C-160), but it also has no equals in fuel efficiency. Relative fuel consumption is only 160 gm per tonne-kilometer. Even the as yet unfinished FLA will use 30 percent more fuel. When carrying out a typical transport mission—conveying 20 tonnes of cargo over a distance of 3,000 km—the An-12 consumes 30 percent more fuel and the Il-76T consumes 52 percent more than the An-70.

Moreover in combination with high-power mechanization, high-pressure flows of air forced over the wings by the helical fans doubles the lifting force and provides the airplane with a unique short take-off and landing

capability. Its take-off run is only 7-8 fuselage lengths. The possibilities of short take-off and landing are especially valuable when delivering cargo and equipment to hard-to-reach areas of natural disasters and local conflicts.

Heavy-duty landing gear (12 low-pressure tires) allows the An-70 to operate on dirt strips. The load on each wheel is twice less than for the C-130. This makes it possible not only to maneuver safely in the absence of landing strips, but also to make short take-offs and landings on dirt strips 600-800 m long, which is beyond the capability of all existing transport airplanes and any under development.

The structure of the An-70 is rather unusual from the technological standpoint. For example almost 24 percent of the weight is made up of composite materials based on carbon plastics (so-called "organit"). Not only secondary unloaded components (fairings, cowlings) but also the most important units—the horizontal and vertical stabilizer and the flaps—are made from composite materials for the first time in an airplane as large as this. A so-called "integral method" was used to manufacture all composite structures, making it possible to shape all of the components in "raw" form by automated winding or facing, followed by "baking" the unit as a whole, like a housewife would bake a pie. This process proceeds practically without human contact with the carbon plastics, and makes it possible to reduce weight by 15-20 percent.

The airplane is controlled by an electric remote control wheel system based on a multichannel digital-analog computer. There is a back-up hydraulic remote control system immune to electromagnetic emissions (from a nuclear explosion or new types of weapons). Transition from one system to the other is practically unnoticeable to the pilots.

The onboard electronic equipment includes a display system consisting of a multicolor display providing the crew all necessary information, and a system to support take-off and landing, including on short strips. The complex of piloting and navigation equipment makes it possible to fly in and outside of airways in all

regions of the world at any time of the day. The aircraft is furnished with modern radio communication equipment, including a radio intercom. A so-called "integrated digital onboard system" with multiplex channels makes it possible not only to reduce the overall length of wiring by 70 percent, but also to easily change the configuration of onboard electronics as required by customers.

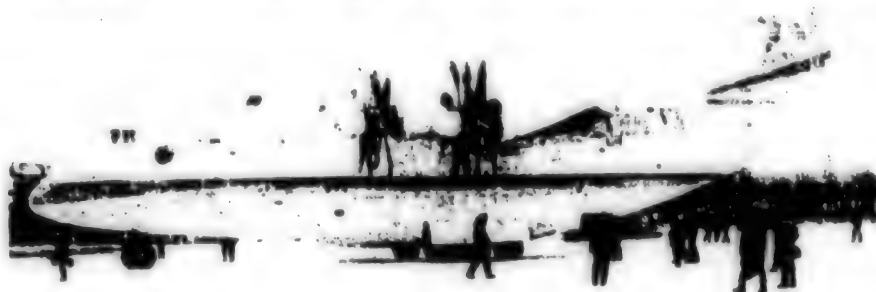
A state-of-the-art airplane is an expensive transportation resource. In order to make a profit, it must work without downtime. This is why a special ground operational support complex was created for the An-70. After the airplane lands, a computer analyzes information from approximately 8,000 onboard sensors, determines the reliability of all systems, reveals failures, and communicates methods to ground personnel for correcting faults and the necessary spare parts. Unit outlays on technical maintenance for the An-70 are only 8-10 man-hours per hour of flying time (for the An-12 and C-130—correspondingly 25 and 20 man-hours). The airplane's life is determined at 20,000 flights or 45,000 hours over the course of 25 years.

The airplane is furnished with built-in freight-handling equipment. The sealed cargo cabin with controlled air temperature permits carriage of all types of cargo, including animals and perishables.

The An-70 is presently the sole medium transport airplane of a new generation actually in existence. Every other new airplane (such as the FLA for example) will require several years of work and outlays on the order of \$7.5 billion, and the selling price will be approximately \$80 million. This significantly exceeds the price of the An-70; moreover even in the planning stage the FLA is inferior to it in a number of parameters. In the opinion of the journal JANES DEFENCE WEEKLY, of all of the latest military airplane developments, the An-70 is capable of exerting the greatest influence upon the fate of the world aviation market.

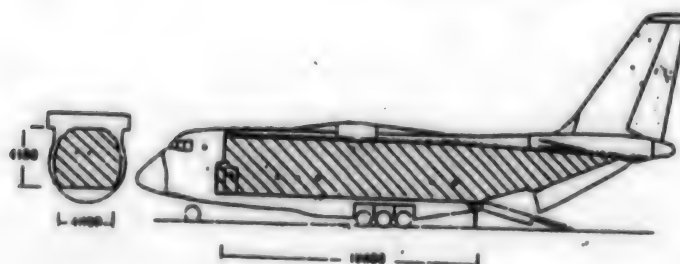
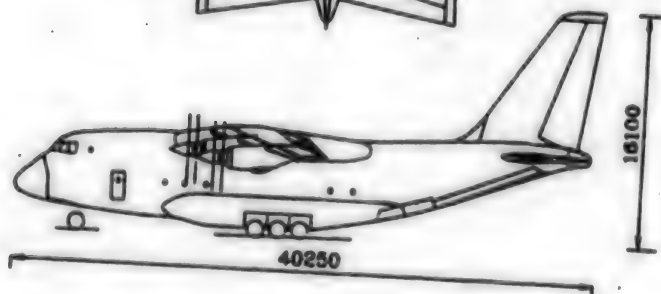
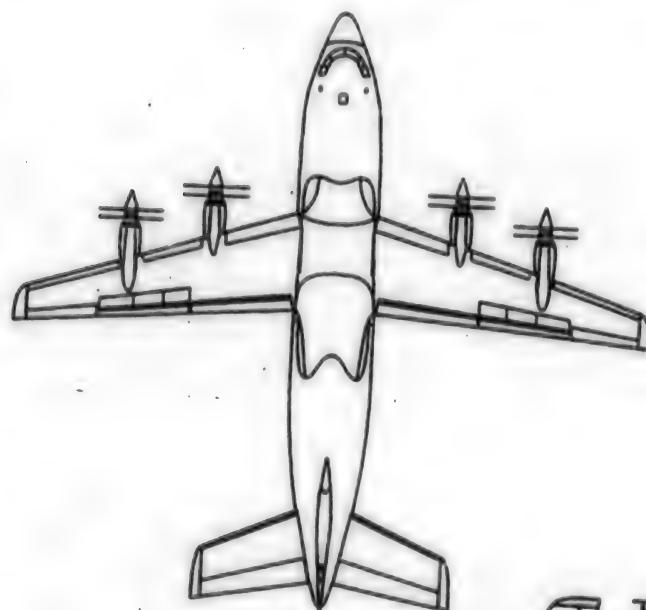
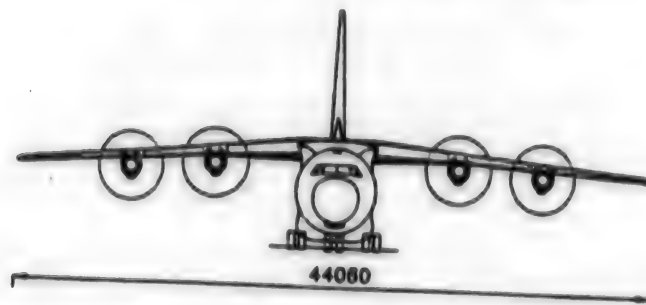
Basic Performance Characteristics

Maximum load—35 tonnes, take-off weight—123 tonnes, cruising speed—750 km/hr, crew—3 persons,

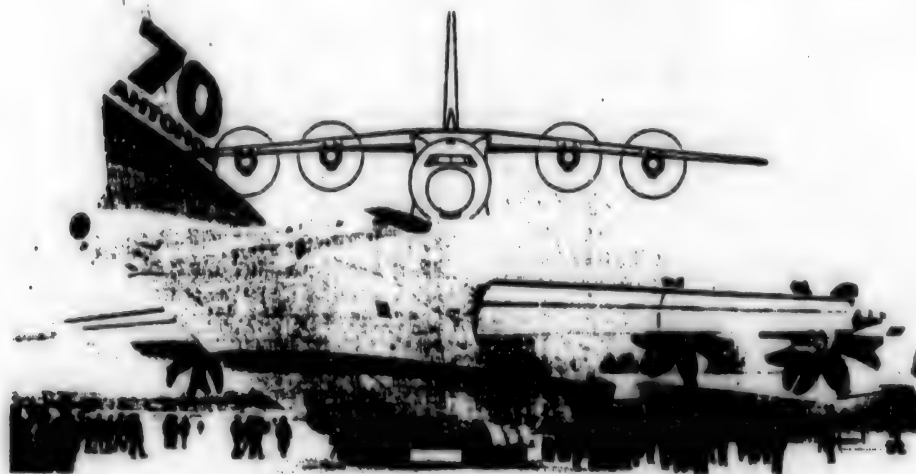


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CIS/RUSSIAN MILITARY ISSUES

JPRS-UMA-94-044
2 November 1994

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cruising altitude—8,600-9,600 m, practical range: with 30 tonnes—5,530 km; with 20 tonnes—7,250 km.

Deputy Commander on Housing Construction in N Caucasus MD

95UM0046B Moscow KRASNAYA ZVEZDA
in Russian 19 Oct 94 p 2

[Interview with Lieutenant General Leonid Georgiyevich Shatvoryan, deputy commander for construction and troop billeting of North Caucasus Military District, occasion, date and place not specified, by KRASNAYA ZVEZDA correspondent Lieutenant Colonel Nikolay Astashkin under rubric "Pertinent Topic": "Our Post Is Small... but There Are Many Problems of Getting Troops Settled in the North Caucasus Military District"; photograph of Shatvoryan included]

[FBIS Translated Text] *The North Caucasus Military District [MD] stands almost in first place in the Armed Forces in the gravity of problems connected with getting troops settled and providing housing to servicemen. Over 15,000 apartments must be built in the district this year. Are they capable of performing this task here? That was the question which began the conversation between our correspondent and Lieutenant General Leonid Shatvoryan, deputy commander for construction and troop billeting of North Caucasus MD, and Leonid Georgiyevich emphasized the following.*

[Shatvoryan] Our district was considered second-rate for many years. Therefore probably questions of getting troops settled in and providing housing to servicemen were given considerably less attention here than in other districts. Now the North Caucasus MD is

a border district. Not just its military and political status grew; there are more troops as well, which means also more homeless servicemen. Presumably there will be around 28,000 of them by year's end. Therefore a specific task also has been assigned: build 15,406 apartments on district territory already this year.

If we are speaking of the housing being built by efforts of military builders, optimism probably is not too appropriate here. The fact is that for seven months of the current year the district was financed on an average at the level of 30-35 percent of the requirement. As you realize, it is extremely difficult to carry on construction under those conditions. Almost impossible...

And we hardly would have succeeded in solving the problem of settling people in had it not been for the construction of posts for families of servicemen being withdrawn from Western Group of Forces, which is being done by foreign firms with funds allocated by Germany. A total of nine military posts are being built in the district. The question of building a 400-apartment military post in the settlement of Yegorlyk also has been resolved. It will be built by the Turkish firm of ENKA, which is finishing construction of a microrayon for the military in the Krasnodar garrison.

[KRASNAYA ZVEZDA] And how do the heads of kray, oblast, city and rayon administrations feel about realization of this program?

[Shatvoryan] Controversial questions of course arise, but we are resolving them constructively. In my view, the fullest mutual understanding has been reached with the administration of Volgograd Oblast, on whose territory one post already has been built and another should be turned over soon.

It is no secret that posts built by foreign firms are valued not just by the military who live in them, but also by local authorities, because, and we will speak frankly, these are to a certain extent bright spots against the background of our architectural dullness. For example, let's take the microrayon in Rostov-on-Don. When it is placed in operation, I am sure people will come there for a tour. It will be possible to see a great deal: excellent kindergartens and schools, well equipped medical facilities, an integrated business layout oriented toward people, and so on. But this is not all: construction of the Rostov housing area, for example, envisages reconstruction of the trolleybus line along Taganrog Highway, widening of the roadway, and construction of sewage treatment facilities and a boiler room. In addition to building a residential compound in Krasnodar, Turkish builders are building a TETs [heat and power plant], which not only will supply the city with heat, but also provide electrical power.

It stands to reason that local leaders cannot help but see such an advantage, which also determines their attitude toward this construction program.

[KRASNAYA ZVEZDA] Leonid Georgiyevich, posts built by foreign firms are outfitted with the most modern equipment. Are our specialists of housing managements and repair districts ready to service and maintain it competently?

[Shatvoryan] In principle, our specialists as a rule are ready to maintain the equipment on the balance sheet as of the moment a post is turned over, inasmuch as their training process begins from the moment the first stone is laid and lasts until the end of construction. The personnel undergo training without separation from production, as they say, in the very compounds being built by the foreign firms. Costs for reprofiling specialists are stipulated in contracts in advance.

[KRASNAYA ZVEZDA] Speaking of housing being built with German money, we emphasize all the time that it is intended for servicemen withdrawn from Western Group of Forces. But in fact who is living in it?

[Shatvoryan] First and foremost, specifically those who were withdrawn from Western Group of Forces. It makes no difference when the serviceman was withdrawn: at the moment the post was turned over or a year or two ago. And vacant apartments are divided up in proportion to the number of homeless servicemen of a particular garrison.

[KRASNAYA ZVEZDA] Our "old" military posts somehow will look lonely against the background of fashionable posts being built with German marks. It is no secret that barracks in many units are in an emergency state, and so personnel have to live in tents. In this connection the question arises: How are things with the allocation of funds for repairing the "old" barracks and housing?

[Shatvoryan] I cannot say that our district is sufficiently built up if it is regarded as a border district. In fact, many engineering questions are not fully resolved and there are neglected posts requiring repair and restoration. Perhaps we did not always correctly choose where to build which post—capital or temporary, i.e., in an easily assembled version. In my view, we have to take a good look at existing barracks and use them properly according to their purpose, thriftily spending the small amounts being allocated for repair of official installations. This year 25-30 percent of funds necessary were allocated for repair and upkeep of old housing, which is becoming dilapidated and requires restoration. We are looking for internal reserves, as is customarily said, but believe me, there is not much.

Be that as it may, we must settle the troops, and we will do this, especially as local authorities more and more often are shifting to giving direct assistance instead of giving an approval for our construction programs that obligates them to little. Take the following fact, for example: after visiting an airborne brigade, V. Chub, head of Rostov Oblast Administration, declared: "From now on this is my brigade..." And he allocated no small amount of funds from the oblast budget to build a messhall and boiler room. The leaders of Krasnodar and Stavropol krais and of Volgograd Oblast are doing the very same. I am sure their example will be followed in other oblasts as well.

Lt-Gen Ivashov on Prospects for CIS Armed Forces Integration

954F0131A Moscow NEZAVISIMAYA GAZETA
in Russian 18 Oct 94 p 5

[Article by Lieutenant-General Leonid Ivashov, secretary of Council of Defense Ministers of CIS member states, under the rubric "The Concept": "Is a Military-Political Alliance Possible?: Prospects for CIS Armed Forces Integration"]

[FBIS Translated Text] As a result of the Soviet Union's disintegration, states of the new formation, the CIS, inherited fragments of a once rather powerful military machine with a rigidly centralized system of functioning. These fragments proved to be of different sizes; moreover, they did not even bear a resemblance to a finished system in the form of troop (force) groupings, command and control entities, echeloned stockpiles, mobilization deployment plans and other elements. Russia, Ukraine and Belarus ended up in the somewhat better position.

The second problem in importance in the majority of states of the post-Soviet space was the absence of experience in military organizational development and in organization of a defense, and the acute shortage of military cadres, especially in the strategic echelon of leadership.

The change in the geopolitical situation in Eastern Europe and on former USSR territory demanded a change in operational direction of troop groupings and in the nature of their missions.

Disruption of the armed forces material and technical supply system posed serious (and for some states insoluble) problems in supporting the vital activities of new national armies.

And even that dismal status of armed forces was exacerbated by armed conflicts both within as well as among the new sovereigns. Attempts by sober-minded politicians and generals to preserve a unified military-strategic space and give the armed forces a combined nature were not crowned with success. The Collective Security Treaty was signed on 15 May 1992, and hope began glowing that there would be success in preserving the nucleus of a military system and keep it from total disintegration through coordinated actions of the six states parties to the Treaty. But after signing the Treaty, the states parties took up a waiting position with respect to implementing it and fleshing it out with specific content and organizational measures. Evidently the flywheel of a "civilized" divorce was still picking up speed and it was extremely difficult to stop, let alone force it to rotate in the direction of integration.

Therefore although the Treaty and a series of agreements adopted for its elaboration slowed the process of military disintegration, there was, nevertheless, failure in solving the problem of securing Commonwealth states. Disintegration of the unified military system and the unified defense space, a low strength level of armed forces and a low degree of their combat effectiveness became today's realities.

The realization both by politicians and by heads of military departments as to the need to unite efforts in the matter of providing elementary military security was seen as a solution to the situation at hand. And no one in the Commonwealth today refutes this.

In what organizational form this unification will occur is another question. At the present moment CIS states have different integrational degrees of readiness, from readiness to create a unified army together with Russia to an endeavor not to cast a shadow on their own sovereignty in any way. It appears that three forms of organizational unification in the military area are most appropriate for consideration in our situation:

1. Coalition of states (allied obligations for a special period in the absence of unified coordinating bodies and a unified or combined command).
2. Military-political alliance (formation of a system of permanently functioning political and military bodies, combined military structures, groupings of forces and assets, mutually coordinated operations plans and troop and staff training plans).
3. Deeper military integration, with coalition structures having supranational powers and their decisions being mandatory for member states, with a common military budget (in addition to national budgets), and with unified armed forces under a unified coalition command element.

In the assessment of the majority of specialists working on the military security problem, the second form of military integration is more suitable for the present state of Commonwealth relationships. We are confusedly going through the first form at the present time and are still too young for the third. This also was confirmed by ministers of defense of states parties to the Treaty at their session on 18-19 July of this year, and the Russian Foreign Intelligence Service also draws the very same conclusion.

The Collective Security Treaty does not impede a choice of any of the forms, including creation of a defensive military-political alliance—specifically defensive, inasmuch as the Treaty content bears a defensive direction. And here is the second comment

on Treaty content: we are speaking not of security in general, but only about one of its subspecies—military security.

This concept reflects that level of relations among states and peoples which guarantees the preclusion of aggression and ensures peoples of nonviolent development of relations based on the prevention and preclusion of attempts at resolving political and other kinds of contradictions by means of war, armed conflicts or the threat of use of force.

It should be borne in mind that a collective security system is not something constructed outside the limits of each of the states and protecting their sovereignty, integrity and interests from outside, as it were. Any state and any society is obligated to be concerned itself above all with ensuring security.

At the same time, collective security is not the sum of levels of national security of system-forming components. Rather, this is the form in which each state's capabilities are enclosed in order to make the most effective use of these capabilities and to reduce material and financial costs.

The effectiveness of a collective security system will depend on a number of components, two of which, in our view, will be key or principal ones. The first is the level of security of member states of the system and the second is the status and competence of mechanisms which tie the security potentials of individual states together into a system.

In our opinion, a defensive alliance should become the military foundation of the collective security system on the territory of CIS countries. The very concept of a collective security system is enormously broader than the concept of a defensive alliance. It includes a network of political institutions which govern relationships of CIS countries in the security area, coordinate member states' foreign policy, and create favorable conditions for close military cooperation and stability in the Euro-Asiatic region. A unification of the parties' military-economic potentials on a mutually acceptable basis, development and implementation of a concept of economic security of the Commonwealth, and coordinated actions of other structures involved in security problems can and must become a very important component part and the economic basis of the collective security system.

Here is a debatable question: Do Commonwealth states need a defensive alliance or not? Representatives of foreign policy areas of a number of Commonwealth states repeatedly expressed the fear that creating such an alliance will return the world to bloc confrontation.

Our western partners also express no enthusiasm over reports that have appeared about a CIS defensive alliance.

But a more or less in-depth analysis of the existing military-political situation in and around the CIS and a forecast of the possible development of events for the near and distant term permit concluding the objective necessity of a defensive alliance on former USSR territory.

Arguments in favor:

1. In addition to our peoples' historical, economic and cultural commonality, there exists a geopolitical interrelationship, a coincidence of basic strategic interests, and coinciding goals and tasks of ensuring national security.
2. Impossibility of ensuring military security of Commonwealth states by scattered efforts at the present stage of development.
3. Economic expediency.
4. A real opportunity, through a defensive alliance, to stop armed conflicts on former USSR territory and ensure stability in relations among its components.
5. Presence of real military threats for each CIS state.

I would like to dwell on the last point in more detail.

The western region (Western and Central Europe) is characterized by the presence of modern, combat-ready troops (forces) and weaponry which considerably surpass the combat potential of groupings of CIS countries stationed on this operational axis. At the same time, it should be taken into account that Europe as a whole (except Yugoslavia) has a stable political and economic situation, a developed network of stabilizing international organizations, and a broad body of international-law rules and obligations capable of preventing a crisis development of events by political means and of using force if necessary.

With respect to NATO, there also are deterring mechanisms (a consensus) against initiation of aggression in this alliance.

The high degree of Western Europe's economic integration and the rather high standard of living of its citizens also can be included among deterring factors.

At the same time, it is impossible not to see the U.S. desire to be the leader in Europe, implement its policy (which at times is expansionist), and affirm and defend its interests through European countries and organizations. U.S. imposition of power methods of actions with respect to Eastern European states and Russia cannot be excluded in a certain situation.

In addition, centers of territorial disputes and claims are smoldering in Eastern Europe, including also with respect to a party to the Collective Security Treaty, the Republic of Belarus. There are forces in Romania stating claims with respect to Moldova and forces in Germany stating claims with respect to Kaliningrad Oblast.

With a strengthening of NATO positions in Baltic countries, claims of the latter on Russia and Belarus cannot be excluded.

Therefore a unification of political and military efforts of Russia and Belarus (within reasonable limits) and subsequently of Ukraine and possibly Moldova objectively is in the interests of these states.

Caucasian Region

The situation here is especially difficult. Its difficulty lies in an intertwining of a large number of contradictions and problems into a tight knot. Ethnic problems, the unprotected nature and at times also vagueness of borders, economic disputes, state disorder and so on are present along with territorial claims. And most important, an armed conflict is going on between two parties to the Tashkent Treaty and possible future allies, while almost friendly relationships with a NATO member have formed for one of them. The intervention of third parties in this conflict (and a desire for this already has been noted on Turkey's part) is not precluded, which in turn may widen the scale of the conflict right up to war.

The difficult process of interweaving Azerbaijan, Armenia, Georgia and Russia by means of military-alliance obligations and standards of international responsibility will help establish peace in this region and create a security potential against external expansion and aggression.

Central Asiatic Region

Based on the nature of possible threats and the territorial peculiarity of this region, it appears advisable to divide it into two security zones: western (Uzbekistan, Tajikistan, Turkmenistan and partially Kyrgyzstan) and eastern (Kazakhstan and partially Russia and Kyrgyzstan).

In our view, the principal danger for western zone states stems from Afghanistan. The 15-year civil war, total devastation of the economy, very acute inter-ethnic contradictions and essentially universal arming of the male population may prod the leaders of this state's groupings to seek a solution to the critical situation by unifying against a common enemy. The image of such an enemy already is being created. Afghanistan also is a headache for its neighbors in the

person of Iran and Pakistan as well as other Islamic states of the far abroad. Therefore it cannot be excluded that they may channel an internecine war in the direction of northern territories. This idea may prove to be very attractive with an armed opposition present in Tajikistan and elements of Islamic extremism in other Commonwealth states, and in the absence of sufficiently combat-effective troop groupings united by common goals and a common concept.

With respect to the eastern zone of the Central Asiatic Region, the Chinese factor can in no way be discounted here. The Xinjiang troop grouping surpasses Kazakhstan's Armed Forces in combat potential and mobilization capacities today, and this must be recognized.

And evidently one more operational axis should be singled out as a possible area of application of collective efforts of Russia and Kazakhstan in ensuring military security. This is the Eastern Asiatic Region. The Chinese factor is present here, too. In the next decade China most likely will turn into a nuclear superpower with a rather powerful economic and military potential and unlimited human resources.

China's territorial claims on Russia, Kazakhstan and Mongolia are reflected in the Chinese mass media. Anti-Soviet and anti-Russian articles appear in the press more and more often. Here is the content of just a few of the latest ones: the Soviet Union provoked and began combat operations at Khalkhin-Gol and it illegally tore Tuva and Mongolia from China. The loss of these areas is a disgrace to China, the borders presently existing between China and Russia are illegal, treaties concluded are inequitable, and so on.

The circumstance also should be taken into account that China is building socialism, while our countries have turned toward capitalism, and ideological differences may intensify.

Most likely the pressure of force and ideology on China's part will grow. It is possible to prevent this only by united efforts, above all by establishing friendly relations with China in politics, mutually advantageous, intensive ties in the economy, and trustworthy cooperation in the military sphere. A unification of military efforts on this axis will play the role of a deterring factor.

It is apparent from the above that the nature of possible military threats to CIS states is dissimilar both in content as well as in direction. Based on this, in developing the structure of the military organization of a CIS collective security system, it is proposed to single out several regional subsystems, having in mind that in case aggression is initiated, for example, against Russia in the Far East, other countries will give help in accordance with provisions of the Collective Security

Treaty and national legislation. At the same time, the Russian nuclear shield will be a weighty deterring argument in the interests of security of all parties to a defensive alliance.

There is no question that we understand that military integration is a derivative of the degree and depth of integration in the political sphere and in the economy, and a derivative of the establishment of genuinely allied, equitable relations among Commonwealth states. With consideration of the fact that not all CIS states are ready to participate to an equal extent today in a defensive alliance as a full-scale regional military-political organization, it appears advisable to propose a flexible, phased approach to establishing such an alliance which would envisage the possibility of each party participating in it in accordance with its political, economic and legislative capabilities.

Closer cooperation within the framework of some groups of states and fragmentary cooperation within the framework of others is not precluded here.

Nevertheless, collective security of member states must be based on a number of principles, the basic ones being the following:

- indivisibility of security: aggression against one member state is viewed as aggression against all member states;
- equal responsibility of member states for ensuring security;
- nonintervention in internal affairs and consideration of each other's interests;
- collective defense;
- decisionmaking on fundamental questions of ensuring collective security based on a consensus;
- conformity of the makeup and readiness of forces and assets to the scale of the military threat;
- possibility of individual military bases and installations of some member states being stationed on the territory of other member states.

It is our persuaded opinion that the construction of a collective security system must be based on regional subsystems with consideration of commonality of territories, nature of threats, troop groupings, infrastructure and other conditions and factors.

Each subsystem has relatively independent political, economic and military elements and structures interworking within the framework of the overall Commonwealth collective security system at the level both of horizontal as well as vertical ties. Coalition Defense Forces with corresponding military command and control entities must become the military element of each subsystem. In essence, a grouping of troops and forces must be established in a TVD [theater of military operations] or on an operational axis. The Coalition

Defense Forces will comprise the basis of the Combined Armed Forces, in which reserves, systems common to the entire Commonwealth, coalition naval task forces and other components also may be included.

Command and control entities of the Coalition Defense Forces and the Combined Armed Forces must possess supranational powers in a number of questions concerning combat readiness, tactical and operational training of troops (forces), and their command and control in peace and wartime.

Supranational powers must be delegated to coalition military command and control entities by the Collective Security Council and incorporated in national legislation of member countries.

Decisions on fundamentals of military policy and military organizational development, on methods of repelling aggression and on other important questions of ensuring security must be made by supreme political bodies of the collective security system based on a consensus. Questions of employment of troop groupings on corresponding operational axes, border protection, stockpiling of supplies, development of the infrastructure and others can be resolved at a regional level by entities of interested states.

Included among each member state's functions are specific missions of armed forces combat readiness, training, manpower acquisition and logistic support, and maintaining a stable situation on one's borders.

As I already said above, the collective security system is built on principles of regional subsystems, with coordinating (controlling) bodies in the center and in the regions.

The following can be a possible variant of such a structure:

Eastern European Region: territories of the Republic of Belarus, Western European area of the Russian Federation and Kaliningrad Oblast.

Caucasian Region: territories of the Azerbaijan Republic, Republic of Armenia, Republic of Georgia, and North Caucasus area of the Russian Federation.

Central Asiatic Region, divided territorially into Western and Eastern zones:

- *Western Zone:* territories of the Republic of Tajikistan and Republic of Uzbekistan;
- *Eastern Zone:* territories of the Republic of Kazakhstan, Kyrgyz Republic and Ural-Siberian area of the Russian Federation.

Eastern Asiatic Region: territories of the eastern area of the Russian Federation and the eastern oblast of the Republic of Kazakhstan.

A political-economic body (Defense Council) and a coalition command of the troop grouping are established to ensure security and to organize a defense in each of the regions mentioned. The Defense Council could have the following approximate makeup:

- Council chairman—republic president;
- Council members: government vice premier, who handles questions of military economics; minister of defense; minister of foreign affairs; commander of Border Guard Troops; Russian Federation ambassador to the republic; chairman of Parliamentary Defense and Security Committee; heads of administration of Russian oblasts included in the given region; commanders of Russian troop groupings on this operational axis.

In peacetime this Council concentrates efforts on maintaining peace and stability in the region and settling controversial problems and crises exclusively by political, conciliatory means, while at the same time maintaining a defensive potential at the necessary level.

In case aggression is committed, this Council has the responsibility of organizing the repulse of aggression and defeating the enemy. The operational coalition command is subordinate to the Defense Council.

The armed forces and other troops of states included in a regional subsystem and the corresponding Russian Federation troop grouping placed under operational subordination of the coalition military command and control entity (operational command element) are the basis of coalition defense forces in the region. In addition to operational troop groupings, reserves made up of national formations and command and control and rear services entities of armed forces of member states may be established in regions and subordinated to the regional command with the beginning of combat operations, or they are strategic reserves of the Collective Security Council.

All other military units, command and control and rear services entities, and military educational institutions remain subordinate to the national military-political leadership and are employed under its plans. The specific structure and the effective combat and numerical strength of regional coalition defense forces may be determined by decision of the Collective Security Council based on a proposal of regional bodies and the Ministers of Defense Council.

There also are other possible options for making decisions on the makeup and structure of regional coalition defense forces—for example, in the form of an

agreement among interested states, with the Collective Security Council informed of this.

Participation in regional collective security subsystems by states which have not acceded to the Tashkent Treaty (Moldova, Ukraine, Turkmenistan) is not precluded; rather, it is suggested. Their participation may be fragmentary, i.e., on individual questions (security and protection of sections of borders which are external Commonwealth borders, air defense, cooperation in military production, use of infrastructure and so on), or it may be deeper.

The following should become central coordinating bodies of the CIS collective security system: Collective Security Council, Ministers of Defense Council, Ministers of Foreign Affairs Council, General Secretary of the SKB [Collective Security Council], CIS Military-Economic Commission, Chiefs of Staff Committee, and Staff for Coordination of Military Cooperation (Combined Military Staff).

Establishing a Supreme High Command of the defense alliance and its working bodies for wartime (in a period of threat) appears advisable, with supranational powers granted them for directing the repulse of aggression.

And this, in a very general and oversimplified way, is how the model of a Commonwealth collective security system appears to us.

Without question, what has been presented above is only a variant of a schematic construction of a collective security model on the territory of Commonwealth countries. In its development, the Staff for Coordination of Military Cooperation and the Secretariat of the CIS Ministers of Defense Council took into account the experience and trends of development of Commonwealth processes, the status and level of military security in each of its components, and a forecast of the development of the military-political situation in the Eurasian space and in the world. The analysis persuades us that establishment of an effective security system will have a beneficial effect on maintaining stability in the Commonwealth, will reduce the probability of confrontation and armed conflicts in the post-Soviet space through a system of confidence-building measures and international-law obligations, will permit reducing defense expenditures, and will speed up the process of organizational development of national armed forces.

Establishment of a Collective Security Council based on a military-political alliance is objectively advantageous to all participants, above all Russia. As the nucleus of the system, relying on its allies and being the leader of the defensive alliance, it is Russia that can

take a more active and significant part in solving problems of international stability. A security zone will be formed on a significant portion of Russian borders. At the same time, with that structure of a collective security model, the main responsibility for ensuring security in each subsystem (except for Russia's eastern regions) rests on the states which are part of it, and there can be no talk about any kind of imperial ambitions of Moscow.

The scheme submitted to the reader conforms with conclusions of the Russian Foreign Intelligence Service

(Version "A," NEZAVISIMAYA GAZETA, 22 September 1994), elaborates on provisions of the draft Eurasian Alliance advanced by Kazakhstan President N. Nazarbayev, and follows the course of Commonwealth integration processes.

Of course, discussions, calculations and substantiations of specialists are needed, especially in matters of determining subsystem boundaries, the makeup of troop groupings, the system of coordinating and controlling bodies and so on. This is a natural process and we are ready to take a most active part in it.

INTERREGIONAL ISSUES

Text of Russian-Estonian Troop Withdrawal Treaty

954Q0034A Moscow *DIPLOMATICHESKIY VESTNIK* in Russian No 15-16, Aug 94 (signed to press 24 Aug 94) pp 15-20

["Treaty Between the Russian Federation and the Republic of Estonia on Withdrawal of the Armed Forces of the Russian Federation from the Territory of the Republic of Estonia and the Conditions for Their Temporary Stay on its Territory"]

[FBIS Translated Text] The Russian Federation and the Republic of Estonia, hereinafter called the Sides,

in noting the favorable influence of the process of profound political, social, and economic changes in Europe on the world situation,

being guided by the universally accepted principles and standards of international law, including documents of the United Nations and the CSCE,

taking into account provisions of the Treaty on the Foundations for Interstate Relations Between the RSFSR and the Republic of Estonia of 12 January 1991,

in seeking a treaty basis for the settlement of questions associated with withdrawal of the Russian Federation Armed Forces from territory of the Republic of Estonia and with the conditions for their temporary stay on its territory until their complete withdrawal, and

in wishing to ensure favorable conditions for the further development of good-neighbor relations and all-round cooperation,

have come to an agreement on the following:

Article 1

For the purposes of our Treaty, the following terms have these meanings:

1. "Armed Forces": the organs of administration, groupings, formations, units, enterprises, institutions, organizations, and military educational institutions of the Armed Forces and Border Troops of the Russian Federation on territory of the Republic of Estonia;
2. "persons in the Armed Forces":
 - 2.1. servicemen in military service of the Armed Forces;

- 2.2. civilian personnel working in the Armed Forces;

3. "family members of persons in the Armed Forces" or "members of their families": spouses, minor children, and individuals dependent on persons in the Armed Forces;
4. "place of deployment": territories being occupied and used by the Armed Forces, with the buildings, structures, and other facilities situated on them;
5. "movable property": all types of weapons, ordnance, military materiel, stocks of military equipment, means of transport, and other physical assets of the Armed Forces;
6. "real property": buildings, airfields, ports, training grounds, storage facilities, firing ranges, permanent structures, communications systems, and public utility systems in the places of deployment, as well as the buildings and structures outside of the places of deployment which are being used by the Armed Forces and are not intended to be used as residences; and
7. "Armed Forces pensioners": admirals, generals, officers, warrant officers, and servicemen in extended military service of the Armed Forces, as well as other persons residing in the Republic of Estonia and who receive pensions and allowances from funds of the Russian Federation's republic budget.

Article 2

By the Armed Forces' temporary stay on territory of the Republic of Estonia, the Sides mean the period of time necessary for complete withdrawal of the Armed Forces from the Republic of Estonia's territory.

Withdrawal of the Armed Forces from the Republic of Estonia's territory includes:

1. the departure of persons in the Armed Forces and members of their families, except for:
 - 1.1. citizens of the Republic of Estonia who have not wished to leave its territory, and
 - 1.2. civilian personnel working in the Armed Forces;
2. removal of movable property, except that transferred to the Estonian Side.

The application of Paragraph 1 of this Article is temporarily extended to the cases indicated in Paragraph 3, Article 13, of this Treaty.

The Russian Federation is providing assistance in job placement and in acquiring housing for the civilian personnel who have expressed their desire to resettle in Russia.

Article 3

1. The Russian Federation:

- 1.1. will complete withdrawal of the Armed Forces from the Republic of Estonia's territory by 31 August 1994;
- 1.2. will not increase the number of personnel and replace personnel of the Armed Forces without the consent of the Government of the Republic of Estonia; and
- 1.3. regularly informs the Government of the Republic of Estonia of the number of personnel and the Armed Forces' places of deployment.

2. The Republic of Estonia:

- 2.1. assists the Russian Federation in the withdrawal of the Armed Forces from its territory;
- 2.2. authorizes the arrival and brief stay in the Republic of Estonia's territory of maintenance, transport and materials handling, and security teams of servicemen in the Russian Federation's Armed Forces for valid reasons; and
- 2.3. authorizes the replacement of officer and warrant officer personnel in exceptional cases.

3. The Sides are taking the necessary coordinated steps to provide for the security of personnel in the Armed Forces and members of their families.

Article 4

1. Travel by platoons or larger elements of the Armed Forces outside the places of their deployment and travel connected with the transport of weapons, ordnance, and military equipment is conducted in coordination with the Ministry of Defense of the Republic of Estonia.
2. Flights by airplanes, helicopters, and other aircraft of the Armed Forces in the Republic of Estonia's airspace, as well as the navigation of military vessels and auxiliary craft of the Armed Forces in the territorial and internal waters of the Republic of Estonia, are organized and conducted in coordination with the Ministry of Defense of the Republic of Estonia.
3. The navigation of military ships and auxiliary vessels of the Russian Federation Navy in territorial

waters of the Republic of Estonia for purposes of survival and withdrawal of the Armed Forces is conducted on the basis of the principles and norms of international law.

Article 5

1. Command and staff exercises of the Armed Forces at places of deployment at the level of units, as well as tactical and special tactical exercises which involve several units stationed at different places of deployment in the territory of the Republic of Estonia at the same time, are conducted by notifying the Ministry of Defense of the Republic of Estonia in advance about them and about the time they take place.
2. The Armed Forces make use of radio frequencies coordinated with the Government of the Republic of Estonia.

Article 6

1. Outside of their places of deployment, servicemen of the Armed Forces:

- 1.1. wear a uniform in conformity with the procedure established in the Armed Forces of the Russian Federation.
- 1.2. carry a weapon when on guard duty, as coordinated with the Ministry of Defense of the Republic of Estonia, in conformity with the procedure established in the Armed Forces of the Russian Federation.

2. Equipment of the Armed Forces should have a registration number and a clear distinguishing mark. All registration numbers and markings are established by command authorities of the Armed Forces and are reported to the Ministry of Defense of the Republic of Estonia.

3. Persons in the Armed Forces and members of their families have the right to travel in the means of transport belonging to them on routes of communication of all types, as well as to make use of public land, sea, and air transportation without special preferences.

4. The Republic of Estonia recognizes the validity of drivers licenses, without testing and a fee, which are in accordance with international regulations and in use in the territory of the Russian Federation and are issued to members of the Armed Forces.

Article 7

The Armed Forces use their places of deployment without charge until their complete withdrawal from the Republic of Estonia's territory.

Places of deployment not being used by the Armed Forces for their real purpose as of the day this Treaty is signed, as well as those being vacated as a result of the Armed Forces' withdrawal, are being returned or transferred to the Republic of Estonia.

The Armed Forces' use of places of deployment for commercial purposes is prohibited.

Article 8

The Russian Federation transfers real property possessed and used by the Armed Forces to the Republic of Estonia.

The procedure for acceptance and transfer of the property cited is determined by authorities of the Russian Federation and the Republic of Estonia.

The Sides consider all financial, property, and other claims associated with deployment of the Armed Forces in the territory of the Republic of Estonia, including questions about ecological and other damage, to be completely settled by this Treaty when it comes into force.

Article 9

1. The Russian Federation informs the Republic of Estonia of the forthcoming transfer of the Armed Forces' places of deployment by providing data on the use of the buildings, structures, and territories being transferred, information on the storage of strong, radioactive, and explosive substances, and information on the mining, bombing, and other measures utilizing the substances cited on the territories being transferred.

The Armed Forces also provide information available to them on burial of the substances cited outside the places of deployment.

2. The Armed Forces:

- 2.1. are returning all places of deployment to the Republic of Estonia free of explosive items and toxic and other substances which pollute the environment;
- 2.2. are not disposing of materials and devices which contain radioactive or chemical substances which are harmful to the environment and public health in the territory of the Republic of Estonia;

- 2.3. may dispose of weapons, ordnance, and explosives in coordination with the Ministry of Defense of the Republic of Estonia.

Article 10

The Republic of Estonia guarantees social and economic, as well as personal, rights and freedoms for members of the Armed Forces and their families in its territory in conformity with the norms of international law and the laws of the Republic of Estonia.

Article 11

The Republic of Estonia observes the right of persons in the Armed Forces and members of their families to own their property, including houses, country and garden cottages, and garages, and their right to dispose of this property by selling it or other legal means.

Property owned by persons in the Armed Forces and members of their families which has been specified in a customs declaration is taken out of the Republic of Estonia without the imposition of customs duties, except for articles whose export requires special authorization.

Article 12

1. Persons in the Armed Forces and members of their families are issued certificates without charge for the right to make use of housing by the Department of Migration of the Republic of Estonia.
2. The Republic of Estonia grants the right to persons cited in Paragraph 1 of this Article to make use of the living space they are occupying for the period the certificate is in effect.
3. The period that the certificates issued to family members of persons in the Armed Forces remain in effect is extended without charge by the Department of Migration of the Republic of Estonia in cases where warranted, including the lack of housing for them in territory of the Russian Federation or the need to complete medical treatment, for a period of up to one year from the day that withdrawal of the Armed forces from the Republic of Estonia's territory is completed.
4. The Republic of Estonia grants the right to persons in the Armed Forces and members of their families to sell, for the term their certificate is in effect, the right to occupy state, departmental, or municipal housing without preliminary privatization.

The funds received as the result of this transaction are the property of persons in the Armed Forces or members of their families.

5. Bonds of public capital acquired by a family member of a person in the Armed Forces remain in his possession.

Article 13

The Republic of Estonia continues to provide the Armed Forces with paid municipal services and communications services until their complete withdrawal at prices charged to consumers in the Republic of Estonia.

The Russian Federation guarantees prompt payment for the services indicated.

Article 14

The Republic of Estonia will take part in the construction of housing for servicemen in the Armed Forces being withdrawn from the Republic of Estonia's territory by making use of its construction firms and building materials in the event that this construction is financed by third countries.

Article 15

The Republic of Estonia continues to provide for education in higher, secondary, and special educational institutions, attendance in preschool institutions, and medical service without special preferences for family members of persons in the Armed Forces.

Article 16

The social and legal status of Armed Forces pensioners residing in the Republic of Estonia's territory is defined by a separate agreement between the Sides.

Article 17

1. The Republic of Estonia's border may be crossed by servicemen of the Armed Forces and members of their families without certificates, as well as by the Armed Forces being withdrawn, with authorization by the Ministry of Defense of the Republic of Estonia without a visa and without charge.
2. The Republic of Estonia's border may be crossed by servicemen and specialists of the Russian Federation Armed Forces whose involvement is necessary for the Armed Forces' withdrawal from the Republic of Estonia's territory, as authorized by the Government of the Republic of Estonia.
3. The Republic of Estonia's border may be crossed by ground transport facilities of the Armed Forces located in the Republic of Estonia's territory and the Russian Federation Armed Forces which are

providing for the vital activity of the Armed Forces, as authorized by the Republic of Estonia's Ministry of Defense.

4. The movable property of the Armed Forces which is being taken out of the Republic of Estonia's territory is exempt from customs duties and is subject to customs control by Estonian customs organs at points where it is loaded, with sealing of freight cars and containers used to transport the property at the same time.

In the event that a seal is broken or a freight car or container is damaged, a second customs inspection may be conducted when the border is crossed with the participation of a representative of the Russian Side when the appropriate documents are formalized.

Article 18

1. Criminal and civil cases, as well as cases of administrative law violations involving persons in the Armed Forces or members of their families in the Republic of Estonia's territory, are subject to the jurisdiction of the Republic of Estonia, as a rule.

Persons in the Armed Forces and members of their families possess the same criminal, civil, and administrative procedure rights and obligations as citizens of the Republic of Estonia.

2. Competent organs of the Russian Federation in the Republic of Estonia's territory provide for the Russian Federation's jurisdiction with respect to persons in the Armed Forces and members of their families in the following cases:

- 2.1. when crimes or administrative violations are committed against the Russian Federation, as well as against persons in the Armed Forces or members of their families who are not citizens of the Republic of Estonia; and
 - 2.2. when crimes or administrative violations are committed by persons in the Armed Forces during their performance of official duties.
3. In the event that disputed questions concerning culpability arise, decisions are made on them by the Sides' competent organs.

Competent organs of the Sides may solicit each other for the transfer or acceptance of jurisdiction with respect to individual persons or cases specified by this Article. Such applications are considered favorably.

4. Competent organs of the Republic of Estonia provide for the maintenance of persons in custody and their movement in accordance with judicial decisions and decrees by competent organs of the Russian Federation, under the condition that they are compensated by the Russian Federation for material outlays. Sentences entailing imprisonment and transfer to a disciplinary battalion for persons indicated in Paragraph 2 of this Article are carried out in the territory of the Russian Federation, but for persons indicated in Paragraph 1 of this Article, they are carried out in accordance with decisions by competent organs of the Republic of Estonia.

Article 19

1. Beginning on the day this Treaty enters into effect, the Russian Federation compensates for material damage inflicted on the Republic of Estonia by juridical and physical persons in its territory and by activity or inactivity of the Armed Forces or its members in the performance of their official duties to the extent established on the basis of claims made in conformity with laws of the Republic of Estonia.

Compensation for the damage is made by the Russian Federation no later than three months from the day that the appropriate decision on this is made by the organs authorized.

2. Beginning on the day this Treaty enters into effect, the Republic of Estonia compensates the Russian Federation for damage to the property of the Armed Forces, as well as for harm to its personnel and members of their families, as the result of the actions or inaction by state institutions of the Republic of Estonia to the extent established by a court of the Republic of Estonia.
3. Damage caused to the Russian Federation or harm to members of the Armed Forces or their families by the actions or inaction of physical or juridical persons in the Republic of Estonia's territory, except for state institutions, as well as damage caused to the Republic of Estonia by physical or juridical persons in the Republic of Estonia's territory by actions or inaction of individuals in the Armed Forces who are not performing their official duties or by members of their families, is compensated in accordance with the decision by a court of the Republic of Estonia based on the claims made in conformity with its laws.
4. Disputes which arise between the Sides on matters related to compensation for damage are considered by a Mixed Commission formed in conformity with Article 22 of this Treaty.

Article 20

Questions concerning withdrawal of the 93d Training Center of The Russian Federation Navy on the Pakri Peninsula are settled by a separate agreement.

Article 21

In order to resolve the questions related to the application of this Treaty and the agreements stipulated, a Mixed Commission is formed to which each of the Sides assigns an equal number of representatives.

The Mixed Commission will function on the basis of rules which it adopts.

The Mixed Commission is located in the city of Tallinn.

This Treaty is subject to ratification.

Proceeding from the Sides' mutual effort to resolve all problems associated with the Armed Forces' withdrawal from the Republic of Estonia's territory in a spirit of goodwill, the Sides have come to an agreement that this Treaty will be adopted temporarily on the date it is signed.

The Treaty comes into effect on the day that instruments of ratification are exchanged and it remains in force until the complete withdrawal of the Armed Forces from the territory of the Republic of Estonia.

Paragraphs 2, 3, and 4 of Article 12 of this Treaty remain in effect for one year after withdrawal of the Armed Forces has been completed.

Completed in Moscow on 26 July 1994 in two copies, each in the Russian and Estonian languages, both texts are identical in validity.

[Signed] For the Russian Federation
B. YELTSIN

[Signed] For the Republic of Estonia
L. MERI

Estonia Said To Renege on Russian Army Retirees' Pact

95UM0033A Moscow PRAVDA in Russian
19 Oct 94 p 1

[Article by correspondent Lembit Annus: "Estonia Has Quickly Forgotten About Its Promises: The Treaty on the Social Protection of Russian Military, Signed by B. Yeltsin and L. Meri, Could Turn Out To Be a Bluff"]

[FBIS Translated Text] Tallinn—"Russia has repeatedly violated the treaty on withdrawing its forces, which was signed 26 July"—Prime Minister Mart Laar made this revelation during the traditional Monday

information hour of Estonia's State Assembly. The reader will be surprised, remembering that parliament declared a vote of no confidence against him three weeks ago. His right-wing government must also resign with him. Because of the Estonian Constitution's chastity, the governmental crisis is continuing as usual and its end is not in sight.

Will the State Assembly ratify with complete clarity, generally speaking, the Moscow Estonian-Russian agreements signed by the presidents of the two countries? Mr. Laar has once again idyllically repeated to the parliamentarians: "The question can be put on the agenda only after the minister of justice has completed a legal examination." I will note that the Estonian Government has recently extended the periods of the examination once again.

As the prime minister assured the deputies, "the task of checking whether the treaties on the withdrawal of Russian forces and on the social protection of Russian military retirees in Estonia correspond to Estonian laws and do not allow different interpretations will be organized by conducting a legal examination of them." In doing this, Laar notified the parliamentarians that, according to his observations, "both the political forces within the country and the Russian side interpret differently" the points in the treaties at the present time. When doing this, he did not fail to recall once again that "parliament must in the end decide the final fate of the Moscow treaty."

All this, of course, is so—if it were not for one "but." What kind of legal examination can there be since the treaties themselves were signed two and a half months ago and have acquired legal effect from the time of signing? It is necessary to pay attention to the fact that Estonian politicians have never achieved their ends by any philosophizing and procrastination. Will the deputies in Russia's State Duma bite at the bait spread out? Will they agree to subject the already signed documents to a review? Will they consider the crafty Laar's proposal to add a point to the treaty that Russian forces should be withdrawn from all the territory under Estonia's jurisdiction by 31 August 1994? If this is done, Znanovets and Pechorskiy Rayon in the Russian Federation should automatically pass to Estonia as the 1920 Tartu Peace Treaty provides.

Elkond Libman, a journalist who writes in *ESTONIYA* newspaper, is quite correct: "Judging from a number of signs, the Estonian Government, generally speaking, does not intend to submit the treaty on the withdrawal of Russian forces for ratification because, as it is, the forces have already been withdrawn from Estonia and this means that there is nothing to ratify." M. Laar had

the same thing in mind when he stated: "The Russian forces have left Estonia and this is the main result of the treaty."

Concerning the Estonian prime minister's statements about Russia's repeated violations of the signed documents, they concretely manifest themselves in the fact that "many former Russian army servicemen are still located in Estonia without any permission." If one believes Ennu Tuppu, the defense minister, ((name and title as published)) there are approximately a thousand of these people. Only 381 Russian servicemen have temporary permission for this. The others are living here illegally, thereby violating Estonian laws. Prime Minister Laar notified the people's elected representatives: "The security police have already detained several of these military people and their exposure is continuing."

It seems to me that all this ballyhoo is a smoke screen used to justify the actions of the Estonian Government. The powers that be must, first of all, justify them to their Western kindred spirits.

UKRAINE

Shmarov SUPSOV Address on Military Issues

95UM0034A Kiev URYADOVYY KURYER
in Ukrainian 8 Oct 94 p 5

[Excerpt from speech by Vice Premier of Ukraine and Minister of Defense of Ukraine V. Shmarov at a session of the Supreme Soviet on 4 October 1994 under the rubric "First Person": "Defensive Capability Must Be Sufficient, the Army Must Be Modern"]

[FBIS Translated Text] One of the most important policy tasks of the leaders of Ukraine is, first and foremost, ensuring state sovereignty and political independence and preserving the territorial integrity and inviolability of the borders of the state.

We proceed from the fact that our country is not the potential adversary of any specific nation. It must be realized, however, that sources of military threat, unfortunately, have still not disappeared.

Realistically assessing the military-political situation, it may be asserted that accomplishing the task of preserving the state sovereignty and political independence of Ukraine is impossible today through foreign-policy security measures alone, without the creation of our own system of military security.

We consider the guarantee of our national security, taking this into account, to be armed forces of our own that correspond to international obligations, as well as our own defense industry that would provide them

with the weaponry and military hardware required to restrain and repel military aggression.

Ukraine needs a relatively small but fully manned, well trained, equipped with modern weaponry, battle-worthy and motivated regular army that would be manned both on the basis of universal military obligation and under contract, with social protections, and structured on the principles of sole command responsibility and the centralization of leadership.

The size of the army has to be approximately 0.7—0.8 percent of the population. The portion of military appropriations should be 4—5 percent of the state budget, with the pay levels of servicemen higher than for civilian specialists. Servicemen should not take part in the activity of political parties. Priority in the provision of the troops with weaponry and hardware should be given to new and modern arms. A policy of qualitative rather than quantitative development of the armed forces, that is, should be pursued. What I have said is unfortunately still somewhat of a hypothetical model, and the problem of building our own armed forces is a topical one for Ukraine over the entire span of its independent development.

The socioeconomic situation that has taken shape in Ukraine today, however, could not fail to be reflected in the armed forces, or to have even more of an influence on the level of their combat readiness and the state of national security. The state is at the upper limits of its resource capabilities in supporting a defensive build-up at that level. Suffice it to say that the budget for the armed forces that was approved is only a quarter of what was requested by the Ministry of Defense, providing the opportunity to meet only the immediate needs for the maintenance of the troops, although it must be said that the possibility of the formulation of extrabudgetary funds was envisaged in the income portion of the budget. The build-up and reform of the armed forces has effectively been halted. Their slow reduction is occurring through the discharge of servicemen into the reserves for various reasons. Social problems—the problems of wages and housing—are increasing. More than 70,000 servicemen have no housing today. The state of combat readiness is declining, primarily owing to reductions in the supply of spare parts, the principal types of logistical support, and fuels and lubricants to the troops. The future holds no prospects; the amounts of scientific research and orders in the interests of the armed forces are below critical levels. I feel that the necessity for increasing efficiency in the utilization of the financial and material resources that are allocated by the state for the defense build-up is sharply increased under these conditions.

The spending for the build-up of the armed forces must be balanced with the capabilities of the state at the

current time; extrabudgetary opportunities must be enlisted more energetically, and the burdens on the budget must be reduced by getting rid of excess, that is, through the transfer of excess lands and unused compounds and facilities to the national economy, and the utilization of transport aviation and construction and repair capacity in the national economy.

The question of optimizing the structure and size of the armed forces and reducing the military-bureaucratic apparatus must be resolved. Research of a conceptual nature must be pursued to solve these problems, and development begun of a whole set of long-term and economically substantiated military programs on the basis of the results of that research; it could encompass such primary areas as the reform and build-up of the branches of the armed forces and the arms of service with a regard for real requirements to provide the armed forces with weaponry and military hardware, rear support, the training and acquisition of cadre personnel, and the creation of mobilization reserves and stockpiles, as well as a number of other dedicated programs that are associated with the creation and provision to the troops of certain high-priority types of weaponry, hardware and matériel. This conceptual approach would provide an opportunity to reach the optimal structure and size for the armed forces.

What priorities do I define for myself in the work and the leadership of the Ministry of Defense for the near future?

Military-political activity. This is an important area of work, insofar as preventive work for a state of peace is perhaps more important today than preserving it with arms.

The development of military legislation. This is also activity pertaining to its further improvement.

Economics and finance. Broad and active interaction with the national economy and supporting sectors, and a balancing of the resources and capabilities of the state.

The military-industrial complex. The creation of a national scientific-production base to provide the armed forces with new weaponry and military hardware, as well as means of maintaining and modernizing what they have.

Social security for servicemen. Pay and the housing problem. The latter requires particular attention, insofar as only by solving that problem will we be able to pursue the modernization of the armed forces.

Indoctrination work. This is a resurrection of spirituality, morality, patriotism, and the fight against the

so-called non-regulation relations that unfortunately exist in the armed forces today.

The training of cadre personnel and military education. Two reforms have been pursued here over the last three years. They have unfortunately not brought military education to the necessary condition.

Conversion. This includes the questions of adaptation, the retraining of servicemen that are being discharged into the reserves, and their employment in the national economy.

Changes in the structure of the leadership of the armed forces, and the delimitation of functions between the minister of defense and the General Staff.

These are the most important areas of activity today. Being aware of the problems that exist today in the state and the armed forces, I feel a great responsibility to the people of Ukraine for the future of our independent state, and for the reliable protection of the right of each citizen of Ukraine to live under peaceful skies.

Shmarov Comments on Civilian Leadership, 'START,' Russian Bases

95UM0041 Kiev *NARODNA ARMIYA* in Ukrainian
13 Oct 94 pp 1-2

[Interview with Vice Prime Minister and Minister of Defense of Ukraine Valeriy Mykolayovych Shmarov by Hennadiy Korzh: "We Do Not Need Saber Rattling, but Rather Preventive Measures for Peace"]

[FBIS Translated Text] [Korzh] Valeriy Mykolayovych, the word "collapse" is used more and more often when speaking of the Armed Forces of Ukraine. The system of military-patriotic indoctrination of the youth and the system of military education have been shattered. We have, on the other hand, a great many generals. Some officers assert, at the same time, that no one in the Ukrainian Army has been serving the Fatherland for a long time now, and if they do anything, then it is only for the principle of personal gain. How do you assess the combat readiness of the Ukrainian Armed Forces?

[Shmarov] I am not an adherent of the various assessments. I personally do not tolerate expressions of the "collapse" or "destitute" type lately. This is, you know, far more a populist than an actual understanding of what is happening. There is no collapse of the Armed Forces, and our common task is to keep that from happening. We need to do everything possible to stabilize the situation.

If we are speaking of the troops, they are still in satisfactory combat-ready condition. The social state of the servicemen, their individual problems, the

unsatisfactory supply of the Army, the difficulties that all of the people are experiencing, are doubtless playing a negative role. Most of the officers, in my opinion, are nonetheless preserving both their loyalty to the Fatherland and their fighting spirit. But personal gain... People are always working to earn something, buy something, feed their family, raise their children. The life of society is ultimately built on that... Some flaws exist in the indoctrination work, and it is thus essential to create a state program of patriotic work that would formulate the citizen starting from childhood years.

[Korzh] Some of the mass media are asserting that the naming of a civilian as Minister of Defense will lead to the destruction of the command-and-control system. They are saying in the ranks that the pointless transformations, so tiresome to all, will start again in the central apparatus, and that there will not be enough time for the troops themselves. And the experience gained over the existence of the Armed Forces of Ukraine will be canceled out therein. What do you think on this score?

[Shmarov] The brief history of our Armed Forces has certainly had its own stages. They could be entirely correlated to the persons in the post of minister of the military department. It was not easy for a new nation to form armed forces out of three independent districts that were subordinate to Moscow. This forced their unification into a single whole, and the creation of a unified command-and-control center. Those times elicit respect—as do the people who were working in the military department at the time. They bore their cross with honor on their section of the road. The process of building the armed forces continues today, and we will not soon be able to tell the people that this work is finished. All the more so since the economic difficulties that are persecuting our state are in no way facilitating that work.

There is no cause for alarm—no one intends to destroy the existing system of command-and-control. It does, if you will, require constant improvement. Today, when the economy is projected especially distinctly on the state of affairs in the Armed Forces, their interaction with the national economy, I would even say their integration with it, the search for the optimal economic and financial solutions is very important. But what about the military-political activity of the Ministry of Defense? It is essential today, first and foremost, not to engage in saber rattling, but rather to be engaged in preventive work for peace. And that is inherently handled by civilians, not the military. Diplomats will even have to be enlisted in this work. The time has to be found for these tasks as well, tasks that are better suited to specialists from the national economy, who better understand the economics of the nation and its capabilities for meeting the needs of the Army; the

necessary balance still has to be found here. The military people are for the accomplishment of specific military tasks.

[Korzh] You have inherited a very obsolete system. It could still serve, however, provided there is, so to speak, a good manager. I have in mind the chief of the General Staff. What functions do you entrust to the General Staff and its chief?

[Shmarov] The Minister of Defense answers to the parliament, the government and the President for the state of security and defense of the state. There naturally cannot be two ministers—one "for the economy" and one "for war." The functions of the Minister of Defense and the chief of the General Staff, however, are somewhat different from each other. The world recently has been emerging from the Cold War to a state of agreement. This is important military-political activity in which the minister is engaged. Add to that the economy and financing. If you ask an officer what he is lacking today, after all, he will answer money and material resources. This moreover pertains both to his personal affairs and to his official activities. Interaction with national-economic structures, the devising of state targets, orders for industry, agriculture and science—the minister must also be handle those, as well as activity along the axes of the VPK [military-industrial complex]—armed forces and science—production, the creation of a national armaments program, and the determination of the priority tasks therein. Add to that the question of monitoring, including of the activity of the General Staff. Quite a bit, as you see, is also left for the chief of the General Staff.

[Korzh] I am particularly worried that you will be holding both the position of Minister of Defense and vice premier. The position of Minister of Defense is a very lofty one, in and of itself, around the whole world. How will you have the strength for such a combination? It is, at the same time, necessary to strengthen the ties between the VPK and the Ministry of Defense. The Minister of Defense in Russia is a military person as before, but his first deputy is now a civilian from the VPK.

[Shmarov] I feel that such a combination is essential in the first stage. This provides additional administrative opportunities, and I feel them very strongly today. I do not feel that it should always be this way in principle, but it is simply essential during a period of reconstruction. It is difficult, of course, from the standpoint of the burdens. But it is difficult for everyone today. You refer to the Russian experience. Well then, that is the formula they have come up with there. They are saying in Russian corridors today, why not have a woman heading up the military department of Russia?

[Korzh] What strategic military priorities do you see for Ukraine: Western or Eastern allies?

[Shmarov] Ukraine is a non-alliance state. We are thus not planning to join the North Atlantic Treaty Organization or military alliance created on the territory of the CIS, since that would contravene our legislation. There has to be cooperation with both East and West, with North and South. We have to provide for our own security intellectually rather than by force of arms, and we need to reach agreement with all of our neighbors on this. If Russia is of interest to you, we have very large ties with it and the other countries of the CIS in the realm of military logistical support. The cooperation there is so broad that we cannot repudiate those ties, otherwise our arms will turn into scrap metal after a certain time.

We are pushing, at the same time, for collaboration with the West. That does not mean that we have to become members of NATO, but we will be taking part in various programs. The Partnership for Peace, for example. We feel that this will not only facilitate the maintenance of peace, but will also provide us with an opportunity to study our environment, and in the future, perhaps, to create some forms of collective security, where states will be able to unite their efforts to instill order in places where it is necessary, outside of any dependence on affiliation with national political structures or military alliances.

We are working in this direction. The exchange of specialists is taking place, they are sent for training, and Ukrainian subunits have already taken part in joint exercises. The overall foundations for future work are taking shape today. Whoever comes after us will be able to push on. All this, of course, will depend on the military doctrine of the state.

[Korzh] What is the situation with nuclear weapons? All nuclear weapons are due to be eliminated in accordance with the trilateral declaration. Only some of the missiles, however, are subject to cutbacks in accordance with the START-I treaty. If that is so, and if the trilateral agreement is not fulfilled, will we not then be keeping the solid-fuel SS-24s as a weapon of deterrence, and taking over operational control ourselves? The more so as we have not obtained any security guarantees.

[Shmarov] There is no reason to assert that the trilateral agreements are not being fulfilled. It would be more accurate to say that they are being fulfilled, but unfortunately not entirely. We are indeed meeting the obligations, and conducting ourselves in very correct and restrained fashion on this issue. I would say that

Russia is also fulfilling its obligations quite meticulously. Our foreign counterparts are conducting themselves somewhat incorrectly. The Americans are delaying in the granting of assistance for our disarmament (read: their own security). The process of disarmament that has begun is perhaps appeasing them. Today we are trying to obtain political guarantees of security on the part of the countries that possess strategic weapons. We are trying to make more active the American spending from the Nunn-Lugar fund during the visits of the heads of state that have begun. It is namely that source that has to sustain the program of our nuclear disarmament. A considerable amount of the work is actually being funded from our already strapped budget.

The president has submitted to parliament a proposal for Ukraine to sign the Nuclear Non-Proliferation Treaty. I will not venture a guess what the results of that will be. I would only point out that even if we keep some of the missiles (which actually corresponds to the provisions of the START-I treaty), it would in any case be without nuclear warheads. Other weapons could of course be placed on those delivery vehicles...

[Korzh] Precision weapons, for instance.

[Shmarov] And not only those. It is necessary, in any case, to coordinate the time over which Ukraine could develop that new weaponry with the time frames of the life cycle of the delivery vehicle. It is entirely possible that it makes sense to be occupied with that—we are analyzing that. The state of our national economy and VPK in particular, unfortunately, are such that we do not have self-contained cycles in many areas. We are particularly short in materials science—sufficient production quantity of aluminum, magnesium, titanium and other non-ferrous metals, carbon fibers and chemical products, including explosives, is lacking. Everything needs to be well studied in general, the more so as the policy of the state could be changed.

[Korzh] Will Ukraine be a missile and state power, as your predecessor has asserted?

[Shmarov] I, as a person with 29 years of work experience in the missile and space industry, have the right to confirm this with full awareness of what is occurring there. A national space program exists that is figured through the year 2000. The targets are being set, where they are needed, to create our own independent, local production cycles as quickly as possible (Ukraine is not a large enough state to do everything), and cooperation is being set up where necessary; the capacity that we objectively possess in the realm of missile and space engineering is being preserved.

It should be stated that things are going pretty well so far. I feel that we will try to launch the first surveillance

satellite in 1996 (for remote sensing of the Earth), and, a year later, the first geostationary communications satellite.

This industry is also active today, but it is filling orders for Russia for the creation of special satellites and the corresponding parts and assemblies. The capacity of the sector, of course, is only about ten percent utilized.

[Korzh] What do you see as the future of the Black Sea Fleet? A Ukrainian Navy?

[Shmarov] Ukraine should have its own fleet, since a significant portion of our borders are maritime borders, after all. That is why we are creating our own naval forces. They are still in the creation stage, of course; the corresponding logistical base, the fleet itself and the infrastructure are all lacking, and the training system has been destroyed. Everything has to start from square one. But the patriots who are serving in the Ukrainian Navy are doing so with great enthusiasm. I do not mean to paint an idyllic picture by any means. I understand that the fleet officers of Ukraine are perhaps experiencing greater difficulties than the officers in other branches of the service.

But the Black Sea Fleet will be divided up sooner or later. That is understood by both sides. I do not think, however, that it will be done tomorrow. We have reached the most important thing—the distribution of the shore facilities and bases. I think the problems will be solved, and the Ukrainian navy will be given a large quantity of craft and the corresponding infrastructure. Some orders, by the way, have also been placed at the shipyards, although the shortages of money are not permitting that work to be done as it should. I think, however, that we will have a good, compact fleet by the year 2000, which will ensure the accomplishment of its mission. We do not, after all, intend to gain access to the world's oceans; we need to ensure the security of our own shores, and repel possible attacks in the Black Sea area. We are working on such a fleet.

[Korzh] That means that we have no interests in the Mediterranean, or the more so the Atlantic?

[Shmarov] We are not an aggressive nation.

[Korzh] But we do fish?

[Shmarov] We catch them, but we do not see them; the fishermen sell them to other nations. If you have in mind protection against piracy, then let us analyze the state of our fishing industry. It is at the brink of changing its form of ownership. And we are ready to consider a program of convoys for fishing-industry vessels, if the customer (a joint-stock company or collective enterprise) finances it, since the capital is

essentially private, while the money to protect it would have to be allocated from the budget.

[Korzh] But these private enterprise pay taxes, don't they?

[Shmarov] Yes. But what will you say to the rest of the 52 million taxpayers? We need to think hard about it, in any case. Calculate how much they pay in taxes and what the convoys cost. The question is often asked of who will escort the tankers. But there aren't any tankers yet, or a terminal itself. Those tasks will arise, and we will adjust the principles for the creation of the fleet.

[Korzh] The Black Sea Fleet of the Russian Federation, as it is already being called officially, is known to be conducting exercises, including with live firing. What rules govern its entry and departure from the territorial waters of Ukraine?

[Shmarov] I would like to emphasize that the Black Sea Fleet is under dual subordination and dual command-and-control, even though the word "dual" could be put in quotation marks... It enters the territorial waters of Ukraine, and departs from them, adhering to all required border procedures. There have been some incidents, but they are more the exceptions to the rule.

[Korzh] Will there be Russian bases on Ukrainian soil, and for how long?

[Shmarov] Your question perhaps pertains to the 43rd Missile Army and the Black Sea Fleet. The missile troops, although they are under the system of combat command-and-control of Russia, have taken an oath of loyalty to the people of Ukraine. That is even though the question could be asked as you did in relation to the 43rd Army. The greatest problems on this plane, however, are associated with the Black Sea Fleet. The time that Russian sailors are present on Ukrainian territory will depend on the time frame in the lease agreement that is signed. I stress that this will indeed be a lease, with all of the requirements that arise from it with regard to the maintenance of the social infrastructure, the ecology etc. Those requirements have already largely been formulated. I will relate to you what we are able to agree on when we negotiate.

[Korzh] Which is your choice—a rush to conversion, or reasonable trade in arms? What is the state of affairs in the VPK, and particularly Pivdenmash, the Malyshev plant and the Black Sea Shipyard? Or are we depending on arming the An-72?

[Shmarov] A normal state has to produce military hardware and weaponry. Here, incidentally, no one has been pursuing a rush to conversion, we have tried to preserve the capacity that we need in these economically difficult times. Capacity, in other words, that could take

orders and simultaneously cultivate cooperation with other Ukrainian enterprises—the economic ties that existed with Russia, after all, have been severed for well-known reasons. The question of arms trading is not yet an issue; we need to provide for ourselves first and foremost. Things were set up in Ukraine, after all, in such a way that Ukraine has been putting out few of the final defense products; even those involved the most complex types of cooperation with Russia. Strategic missiles, for example. But that is far from the principal type of armaments for us today. The main thing is that there was no production of gun barrels, machineguns, grenade launchers and much more.

Conversion is undoubtedly necessary. Are we really able to provide work for such giant enterprises as, say, the Malyshev plant, which could put out several thousand tanks a year? That is an absurd target for Ukraine. And that is only the lead enterprise—others stood behind it that manufactured the tracks, wheels, diesels etc. That production has to be reduced to a reasonable level, and a self-contained national production cycle created. We are indeed trying to do so today, and not just at the Malyshev plant. Expressions such as reconversion have even appeared among the industrialists. It is debatable, but it is being used to signify the creation of technological fields in the production of arms that were lacking here before.

We are of course converting the Malyshev plant, but that alone along with Pivdenmash could swallow the entire budget of Ukraine. That is why we are leaving the essential minimum, and creating new types of production. But even that is not easy—these enterprises are too specialized. Pivdenmash today is tractors, trolleybuses, windpower equipment, household appliances. The national space program is also being pursued there. The Black Sea Shipyard is getting wonderfully situated in the market, having won orders for a series of tankers from Greece. They are also producing trawlers there. They are being utilized, in short, although not, of course, as in the years when orders for the creation of large military ships could constitute the program for a whole five-year plan. But we are also maintaining the capability of military production at the ChSZ.

We would gladly arm the An-72, it is an outstanding craft. Everything runs into money. But the An-70 is still undergoing static and dynamic testing on the ground—we are still, as they say, driving it around the yard. We all want very much to see it go up as soon as possible, since that craft symbolizes the strength of Ukrainian engineering intellect and the capabilities of our industry. That is even though much of what is on the An-70 came through cooperation, and that is natural. No country is able to build an aircraft by itself—even such countries as the United States, or the USSR in the past. It is still difficult to say what it will have for

armaments, but its principal function will undoubtedly be an aircraft for military-transport purposes. Its refinement is still being covered by the state budget, including under the defense targets. But the An-70 is entirely suited to the national economy as well.

[Korzh] Please describe the state of affairs with the recovery of ordnance.

[Shmarov] Matters are poor, because a very large quantity of ordnance is concentrated in Ukraine. I do not want to alarm anyone with figures, but certain apprehensions do exist. Much of the ordnance was withdrawn in haste from the group of Soviet forces that was stationed in Eastern Europe. The storage areas were not prepared in advance, and storage conditions have not been met. We are doing all we can today to see that opportunities for theft are prevented (the danger of that exists as well); security has been strengthened, and technical means of protection have been engaged as much as possible. We are, at the same time, doing all we can to supply recovery technologies as quickly as possible; not, moreover, through detonation or burning, but rather with the receipt of useful products when the metals are separated out, while the powder is converted into commercial explosives or broken down into other elements. The task is to reduce stores by approximately 25 percent in the next few years and bring them up to storage standards, so as to prevent unsafe situations.

[Korzh] What new weapons will be coming to the troops in the next few years?

[Shmarov] I think that we will be making maximum use of what we already have in the immediate future, while pursuing modernization wherever possible—say, providing tanks with new electronics, and increasing the operating range of radar sets. We are not yet up to creating a whole range of new weaponry, although that does not signify that we are not engaged in such work. I think that the first domestic models will be appearing in about ten years.

[Korzh] The draftees of two drafts were discharged into the reserves at the same time. Who will replace them? The chief of the General Staff, speaking on television, declared that we are drafting ten percent of all draft resources, with the rest finding various ways of evading service. The General Staff itself, however, has to monitor the military commissariats and propose changes in the legislative base, if that is what is needed.

[Shmarov] The laws really do allow many not to be drafted. It is surprising who is granted concessions: commercial individuals, all higher educational institutions without exception, secondary educational institutions, the Chernobyl zones. That is what the legislator has defined. Only ten percent of all draft resources are actually left as a result.

[Korzh] Who has the legislative initiative?

[Shmarov] We do, and we are making use of it. But now the legislator is getting it into his head that it will turn out that it is better for the rural inhabitants to go into the Army. We have some proposals pertaining to how to preserve the workability of the Armed Forces. Having discharged the servicemen from two drafts at the same time, we are passing through a very difficult period of defensive capability. The personnel are being cut to a minimum at many locations, and are being preserved in their entirety only in places where combat alert duty is underway.

[Korzh] When will "hazing" be stopped? The political officers were occupied with this problem in their time. A socio-psychological service was created right from the beginning in the Ukrainian Armed Forces, but it has devoted itself entirely to politics. The Main Directorate for Indoctrination Work later appeared, but it looks like it has also not moved far from the political officers. A huge quantity of officers are serving in the Army and Navy, meanwhile, who are themselves fighting non-regulation relations.

[Shmarov] The question of "hazing" could have been asked of the ministers of defense of the former USSR, starting with Zhukov, and all the ministers of defense of Ukraine. This problem is not a new one, and it would be pointless to name any concrete deadlines for its eradication. I was already saying today that a state program of military-patriotic indoctrination work is essential among both civilian and army youth. You will not take "hazing" with any campaigns, since it is unfortunately too deeply rooted. Reforms and improvements in the Main Directorate for Indoctrination Work are actually being proposed. I would include the problem of "hazing" among those priorities that we must be occupied with at once.

[Korzh] There are many legal offenses and crimes committed among the servicemen. Drunkenness has also not been eradicated. That is why the people are indifferent to the fate of the Armed Forces. If matters continue in this way in the future, they will lose any respect whatsoever. Could American experience perhaps be utilized here? The Army there also was seriously ill after the Vietnam war. The officer corps was heavily cleared out, and only those who wanted to serve were left. The Armed Forces went over to a professional method of manpower acquisition. They do not drink there, and they engage in sports—you do not run into fat officers and generals.

[Shmarov] The Army is not some isolated environment; it is interconnected with the rest of society. The processes that are occurring in the country inevitably penetrate there as well. And if the crime rate rises in

Ukraine, how can that be kept out of the Army? The same for drinking, although I would not say that it is flourishing in the Army. Some drink, and others do not. Regulation order has decreased considerably at the same time.

We undoubtedly see the rebuilding of the Army. You cannot do that all at once, because it is not easy to free oneself from something—quite a few social problems have to be resolved first, and money is needed for that. We see this problem and we will find ways to solve it, but there will scarcely be any results in the next few years. We will be modernizing the Army and reducing its size. The size of the Armed Forces is still set at 450,000 people, but I think that they will be cut some more in the future.

I see definite prospects in the professional method of manpower acquisition. We have 35,000 servicemen under contract today. They must be paid properly, however, for this innovation to progress. The principal jobs in the Armed Forces would then be occupied by professionals. Young people must serve in the Army for educational purposes, from a physical standpoint, and to prepare reserves for the event of military action.

We do not have all that many pot-bellied generals now, but they do exist. I am an advocate of having physical fitness and sports occupy a proper place among the higher officers.

[Korzh] And will you go running in the mornings yourself, to set an example?

[Shmarov] Not in the mornings, since I sleep very late. But I will be attending physical training three times a week, as I am supposed to under the order.

[Korzh] How will the problem of housing be solved? One of your predecessors was even promising cottages. The list in Kiev alone got considerably longer in the meantime. The distribution of apartments is not always accompanied by sufficient glasnost. There is thus room for machinations.

[Shmarov] The problem of housing is a very important one today. The failure to resolve it is impeding the overall possibilities for structural changes in the Army, and the possibilities for reducing the Armed Forces to the level of reasonable sufficiency. There are 72,000 servicemen in need of housing today. And that number is snowballing: people are getting married and families are growing. We used to build approximately 20,000 apartments a year, and they were allocated to the local authorities somewhat in accordance with legislation. That law is not being fulfilled in the local areas today, while the amounts of our own construction have been reduced somewhat owing to cutbacks in the amounts of financing. The military construction personnel,

however, have been able to maintain their capacity. We will try to get financial opportunities (and I will even try for dedicated financing) to provide us with the former level of housing construction. I think that we will be able to improve peoples' housing over the next several years, reduce the list to reasonable size and modernize the Armed Forces. Incidentally, we do intend to build cottages as well—in the missile divisions here, using Western technologies, out of the Nunn-Lugar funds. And some of the military have in principle already built cottages...

I categorically disagree with the fact that glasnost is lacking in the distribution of housing; it takes place with the participation of officers from the housing commission, and is done by and large from those on the list.

[Korzh] What is happening with the military compounds? What state are they in, who is living there, have those that were mothballed not been plundered?

[Shmarov] Many of the military compounds have been turned over to the national economy, and many are being turned over. We are today considering the question of transferring another forty such facilities. The overall trend here is such that we are getting rid of the excess—the upkeep is too expensive. But this is a complex process, since it does not always find a use in the national economy. How, for instance, could one utilize the infrastructure of missile silos located in the steppes or the forests?

[Korzh] Do we need so many proving grounds and test ranges?

[Shmarov] Perhaps we actually do not need so many test ranges. We are now developing a plan for the optimization of the proving ground and test range structure. The land costs a great deal, and 53,000 hectares of test range land creates a colossal burden on the budget.

[Korzh] What program do you have to bring aviation out of its profound crisis? Young pilots, as a rule, are not flying. Whole units have been ruined; not a single officer from the Ministry of Defense was present at the farewell ceremony with the colors of the sole guards PPO [air-defense] air regiment in Ukraine at Vasytkova. Almost all of its officers have been discharged into the reserves.

[Shmarov] The state of aviation really is grave. What is a modern war or the maintenance of defensive capability today, after all? It is the state of the resources, their availability and the possibility of mobilization. The main question is thus not even the quantity of tanks or aircraft, but the availability of bread, fuel and ammunition.

The chief misfortune of aviation is the fact that the aircraft are primarily Russian, and the constant procurement of constituent items and replacement parts are required. Rubles are needed for that, which we do not have. Another problem is aviation fuel. We are also forced to procure it abroad, but in very limited amounts. That is why the hours of flying time are so few. We intend to resolve both of these problems by improving relations with Russia. The excess aircraft are being cut back. The hardware will be sold, and the funds received will be directed toward maintaining the active units. The funds that are lacking could be earned by transport aviation. Its use for national-economic purposes is very disjointed today. We want to create a state company (possibly with mixed capital, but controlled by the state) that would operate officially and is accessible to monitoring. There are enough aircraft in military-transport aviation to create such a company.

[Korzh] If we are now talking about aviation, could you clarify the situation with the two MiGs that you are accused of trying to sell to Azerbaijan?

[Shmarov] The situation was investigated by the Procurator General, who found no crime in that deal. But for readers who are perhaps unfamiliar with the procurator's findings, I would relate that everything turned out fine. Two MiG-25 aircraft were sent for repairs to Zaporizhzhya from Azerbaijan back in 1991. Those aircraft, by the way, consume an enormous amount of fuel, and thus do not enjoy particular popularity. Eight of our radar stations and 14 aviation engines were in turn sent to Azerbaijan for repairs. The Azerbaijanis, in accordance with an agreement signed by the heads of state of the CIS nations, proposed that repaired hardware be exchanged as payment for the work. Ten some Zhiguli trucks appeared. The repair of the aircraft was paid for partly in cash, and partly with those trucks. They are serving in the Armed Forces today. That is how matters actually stand. Popular rumors that two MiGs were sold for those 24 Zhigulis are simply causing a migraine. The deal was a reasonable and profitable one. If an opportunity arises in the future to operate that way, I would gladly make a similar contract.

[Korzh] What do you see as the officer of the year 2000? What will be his social standing in society?

[Shmarov] I would like to see his social status in society be at least what it was in 1990.

[Korzh] Thank you.

CENTRAL ASIAN STATES

Kazakh Edict Creates Defense Industry Committee

954K0107A Almaty SOVETY KAZAKHSTANA
in Russian 14 Oct 94 p 1

["Edict of the President of the Republic of Kazakhstan: On Creation of a Committee on the Defense Industry Under the Cabinet of Ministers of the Republic of Kazakhstan"]

[FBIS Translated Text] Based on Point 3 of the first part of Article 78 of the Constitution of the Republic of Kazakhstan, for purposes of increasing the effectiveness of the work of defense industry enterprises, special purpose facilities, and economic agents with various forms of ownership in producing special products to satisfy the needs of the Armed Forces of the Republic of Kazakhstan:

I DECREE:

1. A Committee on the Defense Industry shall be created under the Cabinet of Ministers of the Republic of Kazakhstan.

It shall be established that the committee shall be a government organ for performing functions of inter-branch coordination and state regulation of the activity defense industry enterprises, special purpose facilities, and economic agents with various forms of ownership.

Decisions of the Council of Ministers within the limits of its authority shall be binding for the corresponding organs of state administration in the republic.

2. The basic tasks of the Committee on the Defense Industry under the Cabinet of Ministers of the Republic of Kazakhstan shall be defined as:

implementation of the state policy in the area of development and production of products for defense and dual application, the formation of programs for the development and structural reorientation of the defense industry, conversion of defense enterprises and export-import deliveries of arms, military equipment, special materials, and gear;

organization of the implementation of plans and assignments for the creation and preservation of mobilization capacities, accumulation of the necessary mobilization reserves, and also other measures for civil defense and mobilization preparation for

purposes of providing for stable operation of enterprises and organizations of the defense industry during special periods;

establishment of scientific-technical, production, cooperative, and foreign economic ties for military-technical cooperation with foreign departments, companies, and enterprises;

licensing of the activity of enterprises with all forms of ownership in the area of development and production of arms, military equipment, ammunition, and products with dual application.

3. The Cabinet of Ministers of the Republic of Kazakhstan shall:

resolve issues of personnel numbers and financial and material-technical support for the apparatus of the Committee on the Defense Industry under the Cabinet of Ministers of the Republic of Kazakhstan

and its placement, taking into account the need to observe secrecy in the committee's work;

approve the statute and structure of the Committee on the Defense Industry under the Cabinet of Ministers of the Republic of Kazakhstan, notifying individual enterprises and organizations of the corresponding profiles.

4. Edict No. 1500 of the President of the Republic of Kazakhstan of 11 January 1994 "On Regulating the Organization and Management of the Military-Industrial Complex of the Republic of Kazakhstan" shall be declared invalid.

5. The present edict shall take effect on the day of its publication.

[Signed] President of the Republic of Kazakhstan N. Nazarbayev
Almaty, 7 October 1994

ARMS TRADE

Modernizing Older Arms Said Wave of Future

95UM0045A Moscow KOMMERSANT-DAILY
in Russian 15 Oct 94 p 10

[Article by Leonid ZavarSKIY: "Service to Mars Does Not Tolerate Poverty"; "New Situation in the World Weapons Market"]

[FBIS Translated Text] Russia has overcome the consequences of the reduction in exports of arms and military equipment, which lasted for three years. According to some estimates, military exports in 1994 will exceed 3 billion dollars, as opposed to 1.6 billion in 1992. However, the 8th International Exhibit DEFENDORY-94 which ended last week in Greece (see issue of 11 October) and the exhibit IDEE-94 in Trencin (Slovakia) demonstrated the change in the state of affairs in the world weapons market, primarily the drop in demand for the latest combat systems. This requires an adequate reaction to the new trade conditions from Russia. Export prospects of the Russian military-industrial complex (defense plants are now oriented toward export owing to the sharp drop in orders from the Russian Army) are commented on by KOMMERSANT-DAILY correspondent Leonid ZavarSKIY.

Expensive Goods Unprofitable, Cheap Ones Disadvantageous

Only a few world arms buyers have a purse commensurate with their appetite. Thanks to their petrodollars, countries of the Arab East have created large arsenals, and many western military experts believe that the capacity of this market has now narrowed significantly. But arms importers from Latin America and Eastern Europe, trying to create armies equipped with up-to-date weapons, run up against a very meager military budget. The only solution is modernization of the arms on hand, and only the most minor purchases of the novelties of world military fashion. As a result, it is not military ambitions, but painstaking calculations based on the criterion of cost-effectiveness that have come to the foreground.

Today 80 countries of the world have Russian weapons (degree of saturation from 20 percent to 90 percent). According to some estimates, the latest systems comprise no more than 5 percent of the arms inventory. Some models (for example the BMP-1 and -2, armored personnel carriers, MiG-21 and MiG-23 fighters) exist in surplus number, but still have lots of service life remaining. The systems of the following generation, be they BMP-3s or MiG-29 fighters, are several times as expensive. At the same time, modernization of outmoded models makes it possible to "drag" their combat effectiveness up to the modern level. Exporters

must quickly offer buyers modernizing technologies, as well as delivery of the corresponding combat components, which overall will make it possible to preserve profits from weapons exports.

So What Does It Cost to Modernize?

The slight Odessa tinge to the question best reflects the demonstrative cunning and concealed slyness of the contracting sides in this delicate problem. The buyers have long played on the competition of the suppliers, skillfully driving down prices. This incidentally does not make it possible to determine their real level—contract prices are kept secret, for if competitors learned them, there would be an immediate reduction in their own estimates. However, in this case the Russian military-industrial complex has no time for slyness. Modernization of weapons for export is not paid for by the state, and independent financing is not affordable for the enterprises. One cannot count on the money of the potential buyer either—in the world the speed of delivery of the "finished product" is valued most of all. As a result, distribution of incomes from weapons export has acquired a new cost item (besides wages and financing of research and development)—"modernization costs." According to some estimates, the cost of modernization of tens of basic types of Russian combat equipment (BMPs, BTRs, tanks, multiple rocket launchers, fighters, artillery etc.) presently in the armament of foreign armies may cost their manufacturers 25 percent of the proceeds from export.

Russian Small Arms Join the "Kalashny" Ranks

As Defendory-94 and IDEE-94 demonstrated, Russian small arms, which served as the calling card for our defense export, have now virtually completely lost their position in the world market. For example, the Kalashnikov assault rifles ("Kalashi"), produced with or without license in 55 countries, have so glutted the market that there is no place left in it for the "home-grown" product. This has forced the "Kalashnikov" association, which has the right to independent export, to quickly reorient itself toward agent services and sale of components for orders from enterprises that do not even produce small arms. The new state of affairs is not so tragic for their products, but as usual they are tormented by money questions.

The Military-Industrial Complex Looks for Cheap Money

Plant directors consider the existing system of financing of the military-industrial complex ruinous. A 35-percent tax on profit and limitation of wages to 6 minimal levels (around 150 thousand rubles) is still not the worst. According to existing rules, orders of the

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Defense Ministry provide for only a 10-percent prepayment. Inflation devalues these monies in six weeks, and reformulation of credit with allowance for indexing takes a minimum of six months. Credits in commercial banks are issued at an interest which, in the words of the director of one of the large defense plants, "you wouldn't mention on an empty stomach." The solution lies in the formation of a symbiosis of weapons developers, their producers, and banking structures, which would assure the financing of export programs too. The most acceptable form is industrial financing groups (PFG) with participation of private capital. There are already examples, specifically the PFG "Skorostnoy flot" which produces small combat, amphibious and passenger ships and vessels. However this PFG now exists only *de facto* and has long been waiting for a government decree giving it official legal status. Those enterprises which are just beginning to form a list of PFG participants will have to wait even longer. And while there is no money, serving Mars is becoming harder and harder.

[Box]

Approximate Cost of Modernization of Some Weapons Systems

- Modernization of the BMP-1 (around 10 thousand of these vehicles are in the armaments of foreign armies) is estimated at 250 thousand dollars, including replacement of the tracks, 6 thousand, and replacement of the grenade launcher and antitank guided missile system, 80 thousand.
- Modernization of the MiG-21 (more than 3 thousand planes were exported)—roughly 40 thousand dollars, including a new radar and airborne opto-electronic systems, 200 thousand.
- Modernization of the "Grad" multiple rocket launcher system—roughly 200 thousand dollars, including the cost of creating a new shell, 50 thousand.
- Modernization of the T-72 tank—more than 250 thousand, including a dynamic protection system and infrared imager, as well as optical and laser instruments, around 200 thousand.
- Modernization of the "Shilka" self-propelled antiaircraft artillery system—around 100 thousand, including a new weapons control system.

Illegal Arms Market Scope, Prices

954F0137A Moscow NOVAYA YEZHEDNEVNAYA
GAZETA in Russian 21 Oct 94 p 11

[Article provided by "S-NOVOSTI" Information Agency, under the rubric: "Arms Bureau": "The Prices of Submarines Have Gone Down in the Caucasus: And Missiles Are Reducing Arms Prices"]

[FBIS Translated Text] Arms are circulating throughout the country. While deputies argue about whether or not they can authorize free arms sales to the population, the "black market" has long ago resolved that task. Today only lazy or especially law-abiding citizens are not arming themselves. So, how much does a Kalashnikov assault rifle or a tank cost and how much are rounds? That question, which to say the least would have sounded strange approximately ten years ago, hardly grates on one's ears right now. Oleg O. responds to questions on "black market" prices. He has been selling arms since 1991. He frequently travels on business to various regions of the former USSR.

"Prices are wildly fluctuating depending on the location and situation. For example, you can purchase an AKM [modernized Kalashnikov assault rifle] either for \$200 or for \$2,000. For example, it's a fact that a Kalashnikov was swapped for a Zhiguli in Abkhazia. They sell assault rifles, depending on the model, for \$200-\$400 in Dushanbe and in general in Tajikistan. You can get Kalashnikovs wholesale in Moscow or in St. Petersburg for 250 'greenbacks' each if you purchase them in quantities of 50 or more.

"A Makarov pistol is \$500 wholesale. A 'TT' [Tokarev Tula pistol] is only sold individually and is more expensive. Rounds for these pistols cost \$1.5 and \$2 a piece, respectively. A 'Mukha' grenade launcher is \$500, an RPG-7 [antitank rocket launcher] is \$400-\$500. Grenades: F-1 ('limonka') [fragmentation hand grenade]—\$200 and offensive RGD's [Dyakonov hand grenades] are \$100.

"If you want something a bit larger, for example, you can purchase a D-30 howitzer in good condition for \$1,500-\$2,000. Approximately six months ago, an order was circulating for five tanks for Chechnya. They offered 150,000 bucks for each one. They didn't purchase new tanks. How much can a tank cost that has been prepared to be scrapped. An armored transport vehicle, also used, costs approximately \$50,000, no more. Indeed, recently prices for spare parts have increased significantly.

"The main thing that I want to point out is: the Moscow market does not at all dictate prices. Everything depends on the political situation in the regions. The more tense it is, the higher the prices are for all types of weapons.

"True story. A battalion of Russian troops entered Tajikistan sometime in 1993. A reconnaissance team was located at a camp of a Tajik tank training subunit. And Tajik Army troops forgot two tanks there during their withdrawal. New ones, in packing grease, with full fuel tanks. The next day was the birthday of one of the reconnaissance team senior lieutenants. At that

time, his fellow servicemen, without thinking much about it, decided to give him a tank. The senior lieutenant drove it for a couple of days. Right now he joyfully recalls that. He only regrets that he didn't remove the machinegun: 'It's a beautiful thing and a good thing to have no matter where you hide it...'

'Incidentally, immediately after arriving in Tajikistan, all of that battalion's equipment and arms were in general written off 'in combat'. And how many other such battalions are there on the vast expanses of Russia and the CIS?'

Participation in Piraeus Arms Fair Analyzed

MM2610145594 Moscow KRASNAYA ZVEZDA
in Russian 22 Oct 94 p 5

[Article by Vladimir Kosarev: "Russia Taking Forward Positions in Arms Trade"]

[FBIS Translated Text] It is a sign of the times that the more peaceful the world becomes, and the faster military budgets and armed forces are cut, the more frenzied and bitter competition on the arms market becomes. Military industry in most countries—until recently a dominant force in their economies—is now going through a profound crisis. Over the past three years West Europe has lost up to 300,000 jobs in military production. Everybody knows about the very serious situation in the Russian military-industrial complex.

Struggling for survival, arms producers and exporters are looking for and seeking to win more and more markets for their products. This primarily explains the abundance of all kinds of exhibitions of arms and military hardware that have been held in various parts of the world of late. This fall has seen five international shows—the Farnborough Air Show, the "Arms, Military Hardware. Conversion" Fair in Nizhniy Novgorod, and military hardware exhibitions in Greece, Bulgaria, and Slovakia.

Probably the most noteworthy of these was "Defendori [name as transliterated] '94"—an international specialized exhibition of conventional arms for ground forces that was held in Piraeus (a suburb of Athens) in early October. It was at "Defendori" two years ago that Russia stated its desire to regain its lost positions in the arms market by mounting a relatively large exhibit of Russian military-industrial complex products abroad. Following this we have participated in virtually all the most important exhibitions and have been able to overcome the depression in arms exports and the open boycott by our competitors. Trade relations with China, India, and the Persian Gulf countries have been stepped up. A breakthrough has been made in Southeast Asia and Latin America.

In the arms trade Russia now shares third and fourth spot with France, behind the United States and Britain. In the six months of its existence the "Rosvooruzheniye" State Company, which was set up with the aim of strengthening state control over arms exports and making them stable and dynamic, has signed contracts worth more than \$1.5 billion. In 1994 as a whole, according to experts, the arms trade will earn us \$2.1-3.0 billion.

At the Greek exhibition, in which more than 30 countries took part, Russia displayed around 70 of the most modern weapons and military hardware systems. But, unlike previous exhibitions, this time there were mainly models, mockups, charts, and videos, which are considerably cheaper than actual hardware—even if, admittedly, less impressive. The subject area of ground forces includes the "Tunguska," "Tor," "Buk," and "Igla" surface-to-air missile systems, the "Kornet," "Metis," and "Shturm-S" antitank systems, the "Smerch" multiple rocket launcher, the BMP-3, the BTR-80, various small arms, radars, ammunition, and so forth. On the naval stands greatest interest was shown in fast attack craft, patrol boats, air-cushion vehicles, Project 636 and 877 EKM [expansion unknown] diesel-electric boats, shipborne artillery and anti-aircraft missile systems, the "Moskit-E" shipborne missile system, and state-of-the-art mine and torpedo developments.

Nonetheless, these were not the most important aspects of our exhibit. Preparing for "Defendori '94," "Rosvooruzheniye" specialists took account of the fact that in the two years of our active participation in international exhibitions we have publicized the best examples of Russian weaponry and military hardware pretty well. As Pavel Trishin, deputy general director of the "Rosvooruzheniye" State Company, aptly put it, the entire world knows and can pronounce words like "Tunguska," "Tochka-U," "S-300," and "MiG." It is unrealistic to be constantly demonstrating new equipment with so many exhibitions to attend. And the ability of our potential partners to buy leading-edge weaponry is not great either. At the same time, many countries have huge numbers of our weapons. In years gone by the USSR used to supply more than 80 states. There are several thousand MiG-21's alone all over the world.

The expansion of the Russian arms market was involuntarily promoted by the FRG, which transferred to its NATO partners—mainly Turkey and Greece—quite a lot of the former Soviet weapons it had inherited from the GDR. It is far more profitable to upgrade them than to buy new ones (upgrade expenditure is, on average, 10-60 percent of the cost of buying new). Many of the users of our weapons—Romania, for instance, which has quite a big MiG-21 fleet—have

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become convinced of this. Engine replacements and avionics refits are turning the plane into a modern combat aircraft that is virtually the equal of its latest counterparts.

Given all these facts, Russian exhibitions have for the first time been geared toward demonstrating the possibilities in upgrading our hardware and weapons, the production of spares for them, servicing, and personnel training. And this approach has proved to be justified. At talks held with foreign partners, representatives of our official delegation—headed by Colonel General Anatoliy Sitnov, the Russian Federation Armed Forces' chief of armaments—discussed upgrading problems during numerous contacts between Russian arms producers and their foreign colleagues.

Incidentally, we are not the only people offering these services. Many firms from the United States, Israel, China, and a number of other countries are upgrading our weapons. And it was no accident that, at a press conference given by the Russian delegation, Western journalists asked about our attitude to the fact that foreign companies are taking the "trouble" to improve Russian weapons. Col. Gen. Anatoliy Sitnov was very laconic in his reply—any arms upgrade that is not carried out by the developer could have serious consequences when it comes to using the weapons. Convincing examples were cited to confirm this conclusion.

The Americans were next door to our pavilion at "Defendori '94." Their exhibit, as usual, was the largest at the exhibition, although they were not "appearing" as a single team, but as various firms. There was not even an official U.S. delegation. And although the Americans gave the Russians very friendly smiles at protocol events and their daily meetings in the exhibition pavilions, you always felt that our participation in the arms business sticks in their craw. Incidentally, sometimes this fact was not particularly concealed but was quite unceremoniously made plain.

Yes, the United States is jealous about foreign success in the arms trade and is doing everything to obstruct it. The ways and means used are very traditional—from discrediting Russian military-industrial complex products in the mass media to political pressure on our potential customers, well-coordinated disinformation campaigns, and dumping attempts. One stand in the American pavilion featured a huge photo of a T-72 tank being hit by a U.S.-made missile. Where such a thing could have happened remains a mystery. According to evidence from "Rosvooruzheniye" specialists, there have been frequent cases of envoys from the major military hardware-producing and -exporting countries that compete with us visiting the leaders of states intending to buy our weapons and warning them of the undesirability of such a deal.

Nonetheless, interest in Russian weapons and military hardware is growing worldwide. In the course of "Defendori '94" the representatives of our official delegation held very fruitful talks with the Greek military leadership and with delegations from Argentina, Venezuela, Chile, Colombia, Bulgaria, Canada, Italy, and other countries. Prospects for and avenues of military-technical cooperation were discussed, and in a number of cases very specific agreements were mapped out.

Commenting on these contacts, Major General Nikolay Zlenko, acting chief of the Russian Federation Armed Forces General Staff Main Directorate for International Military Cooperation, understandably did not go into any particular detail, but talked about actual agreements likely in the immediate future. The greatest interest is in the possibility of cooperation with foreign firms on the joint production and export of weapons. There are currently more than 20 different international consortiums developing [razrabotka], producing, and exporting weapons in Europe alone. And, judging by everything, this trend will continue. We have already experienced its benefits in the sale of the BMP-3 to the United Arab Emirates, when the French fitted their electronics to our vehicle. A thermal imaging sight for the BMP-3 has now been developed and tested in conjunction with the French firm of SAT. It is planned to set up joint ventures with Malaysia, India, and Germany to service MiG-29's. There are good prospects for the joint production of helicopters.

What else was notable about "Defendori '94"? Defense enterprises from Udmurtia and Tula—now joint-stock companies—were showing their wares abroad independently of "Rosvooruzheniye." They are now entitled to enter the international market with their products independently and are therefore brimful with bright hopes and plans. But it is still too soon to talk about the results of their participation in the exhibition.

There is one other detail worth mentioning. A representative delegation from the Ukrainian Defense Ministry attended the exhibition as observers and was pretty active. It could be seen particularly frequently beside the stands of American and West European firms. Answering my question about what had prompted this interest, Captain First Class Nikolay Serdyuk, chief of the Ukrainian Navy's Shipbuilding and Armaments Directorate, frankly stated: "This is linked to the fact that we have had difficulties at certain stages with cooperation with our former partners." You can draw your own conclusions.

At the end of the exhibition the leaders of the "Rosvooruzheniye" State Company held a briefing for Russian journalists at which certain results were summed up. The analysis was fairly self-critical. Not

all the mistakes and shortcomings of previous exhibitions have been taken into account, some of them have become chronic. In the opinion of Vladimir Kolnoochenko, general director of the Russian exhibit, a good, positive result could be achieved by sending far fewer people and displaying fewer exhibits, which would help to save considerable amounts of money. It was also said that it would be advisable to reduce the amount of our participation in international exhibitions, and that a unified state organ is needed to coordinate all these issues, including the composition of delegations—these functions should be assigned to "Rosvooruzheniye."

Indeed, this is now the only structure in the country that is capable of promoting Russian military-industrial complex products in the international marketplace. At all the recent exhibitions "Rosvooruzheniye" has been working in close contact with the Russian Federation Defense Ministry. And that is a favorable factor. The arms trade is not an end in itself. It should promote not only Russia's economic interests, but its political interests as well. And these lie in ensuring that our country's prestige and influence in the world increase thanks to military-technical cooperation.

It is quite understandable that we cannot offer for sale everything that we have available. Specialists from the Defense Ministry and the Russian Federation Armed Forces General Staff are analyzing which weapons systems can or cannot be delivered to certain countries on the basis of the geopolitical situation in the region in question and many other factors. All this shows convincingly yet again that the state should have the exclusive prerogative in the arms trade.

The next Russian weapons "benefit performance" will be held in March—at "IDEX '95" in the United Arab Emirates. We would like to hope that participation in this major and prestigious exhibition will promote the strengthening of Russia's position in the international market and confirm that our weapons remain the world's best.

DEFENSE INDUSTRY

Defense Industry Restructuring Proposals Presented

954F0205A Moscow NEZAVISIMAYA GAZETA
in Russian 25 Oct 94 p 4

[Article by A.N. Shulunov, Defense Enterprise Assistance League Presidium spokesman: "The Defense Enterprise Assistance League Proposes the Structural Transformation of the Military-Industrial Complex—A Pivotal Issue of the Reforms Being Conducted"]

[FBIS Translated Text]

Letter to NEZAVISIMAYA GAZETA

Dear Vitaliy Toviyeovich! Oleg Antonov's articles on the military-industrial complex, its current state and its future were published in the September 1, 6 and October 13, 1994 editions of your newspaper.

Not dwelling on an analysis of the mentioned articles, I request you publish "Predlozheniya Ligi sodeystviya oboronnykh predpriyatiyam po strukturnoy perestroyke oboronnykh otrasley promyshlennosti" [The Defense Industry Assistance League's Proposals for the Structural Transformation of Industry's Defense Sectors] that is attached to this letter. "Proposals..." was developed by League experts and was discussed by a sufficiently broad circle of military and civilian specialists and at the present time has been sent to the Federal Assembly, RF Government, Security Council and to interested ministries and departments.

In our opinion, the structural transformation of the defense industry is a pivotal issue of the reforms being conducted. Therefore, it appears to be advisable to conduct a "round table" with the participation of a broad circle of specialists, representatives of executive and legislative authority, and society. I would like NEZAVISIMAYA GAZETA to take the initiative on this issue.

On behalf of the Defense Industry Assistance League Presidium
Respectfully,

[Signed] A.N. Shulunov

NEZAVISIMAYA GAZETA shares the opinion of the Defense Industry Assistance League Presidium that structural transformation of this sector of the economy is a pivotal issue of the reforms being conducted.

The importance of this problem has been caused by the fact that in the Soviet period the military-industrial complex practically totally concentrated Russia's scientific-technical potential within itself: high-technological and scientific-intensive production and the most highly skilled scientific-technical and production personnel. Its self-development attained sizes that would be exhausting for any economy, not only for the Russian economy, and its conversion is an objectively necessary process. The hypertrophied military-industrial complex accelerated the collapse of Soviet power—a lack of attention to conversion problems could halt democratic transformations.

Excessive radicalism in restructuring economic relations has placed the military-industrial complex in a difficult situation because it does not take into account that:

the scientific-technical potential that has been accumulated in the military-industrial complex must become the basis of the restructuring of all Russian industry because only this will permit Russia to enter the world community as an industrially-developed power and not as its raw materials appendage toward which the government's policy is leading; and,

the policy of "bankrupting" military-industrial complex enterprises will result in destructive social consequences, the weak repercussions of which can be found in the results of the elections of December 12, 1993.

Taking all of this into account, NEZAVISIMAYA GAZETA accepts the proposal to organize a "round table" dedicated to military-industrial complex issues and publishes the document sent by Mr. Shulunov.

The Defense Industry Assistance League's Proposals for the Structural Transformation of Industry's Defense Sectors

The Document

The systematic reduction of the amount of the state defense order (the state order has been reduced by a factor of five since 1991) and the predicted further reduction of the amount of financing in 1995 requires another look at the structure of the industry's defense sectors and the mechanisms for implementing the state defense order.

The structure of the defense industry that developed at the end of 1994 is characterized, on the one hand, by a significant number of enterprises that are involved with the defense order (680) and by the differing level of utilization of their capacity and, on the other hand, by the total uncertainty for the majority of enterprises in their short-term and long-term prospects. The absence of prospects, enterprises' own financial resources and conversion credits is resulting in the continuously growing indebtedness of enterprises and, in the final analysis, to bankruptcy. The defense complex's problems in 1995 are already visible right now: besides the destruction of technological and production ties which will create extreme difficulties in executing NIOKR [scientific research and experimental design work] and export deliveries of arms and military equipment, the situation will be exacerbated by the total loss of individual directions of military science and production.

Having taken 1994 as the financial base, we need to define a 2-3 year interim arms program plan (basic directions, subject matter, priorities, mobilized capacity, coordination with the near and far abroad, and others) and lay it at the foundation of the structural transformation of the defense industry to prevent the loss of mobilized capacity and to preserve the nucleus of defense science and production.

In the process, it is advisable to increase the share of NIOKR along the primary directions of defense subject matter, having devoted the required attention to work on the modernization of models of arms and military equipment that are at the level of the best of world equivalents and to the issues of inter-design and inter-type standardization of systems and elements of arms and military equipment and also on work for the improvement of defense technologies.

In general, we need a carefully weighted selective structural policy for the maintenance of priority directions in the defense industry.

Proceeding from the provisions set forth above, we propose conducting the optimization of the composition of enterprises that are engaged in the fulfillment of defense orders through the reduction of their number with the simultaneous transfer of production from enterprises with a light workload to enterprises that have a high share of the workload. In the process, not only the degree of monopolization but technological compatibility, regional and other factors must be taken into account.

The following are required to implement structural transformations in the defense industry:

1. Remove from industry's defense sector enterprises those enterprises, plants and KB's [design bureaus] that have a small percentage of the defense order workload and that are not monopolists of this direction of technology (24% of defense enterprises do not have a state order and 39% of enterprises are utilized to no more than 25% of their capacity).
2. Leave 2-5 principal scientific research institutes in each sector, having transformed the remaining scientific research institutes and design bureaus into subunits (scientific technical centers) of principal scientific research institutes. Conduct financing of scientific research institutes from resources that have been provided for the development of basic and applied science and also resources that have been allocated for the execution of defense NIOKR.
3. Divide principal enterprises (firms) by weapons systems and complexes that have a state defense order in accordance with the NIOKR program and arms and military equipment purchase plans and

form a cooperation of 2nd and 3rd level enterprises that support the fulfillment of this order.

Cooperation of 4th and subsequent level enterprises forms base technologies that are common for the majority of industry sectors, including the defense sector. As a result, the indicated enterprises must be separated from the direct executors of the defense order and be financed by a separate budget line item—"RF base technologies".

4. Based upon an RF Government decision, concentrate the technological equipping of these enterprises in the complex's principal enterprises-developers (finished items) or in enterprises with the delegation to them of property rights and the responsibility for its preservation and utilization to preserve high technologies in conditions of the reduction of the activities of many defense complex enterprises. Make required changes to the legislative base that ensure the preservation of intellectual property based upon the directions of arms and military equipment.
5. The Ministry of Defense, together with the Ministry of the Economy, the RF TsB [Central Bank] and Ministry of Finance will determine a group of authorized banks through which financing of the state order will be carried out for the timely and complete dissemination of budget resources to defense complex enterprises.
6. Introduce the principle of the execution of national programs (projects) and designate the appropriate responsible managers—participants of developments and dissemination of budget financing within the project for the development of especially important weapons and military equipment systems.
7. The following can be included in the reformed structure of industry's defense sectors:
 - federal and government enterprises;
 - joint stock companies with a controlling block of stock (gold stock) that have been secured in federal property; and
 - defense-oriented joint stock companies and commercial structures based on special agreements.
8. In accordance with the priorities of a selective structural policy, request that the RF Government accelerate the creation of an FPG [not found] in the Russian defense complex not only on a voluntary basis but also in accordance with a Council of Ministers—RF Government decision, to accumulate, concentrate and invest capital in the defense industry.

9. Normalize a decision-making system in the state on defense complex issues to preserve the nucleus of its scientific-production potential and the effectiveness of the defense industry structural transformation that is being conducted. Increase the prestige and economic attractiveness of the state defense order. Accelerate the adoption of the law on the state defense order.

10. The Russian Federation Ministry of Defense and Russian Federation State Committee for the Defense Sectors of Industry will form a centralized fund of outside budget additional financing of NIOKR. Develop and submit for RF Government approval a statute on its functioning, having in mind priority financing of research work in the sphere of the development of the latest models of arms and military equipment.

The sources of financing of this fund can be:

- receipts from the export of arms and military equipment in the amount of 10% of the sale price of items that are sent to the NIOKR maintenance fund; and,
- investments of Russian-owned foreign commercial structures that are interested in obtaining a profit for investments of capital or property of eliminated or reformed defense enterprises.

11. Request the RF Government form an interdepartmental working group to prepare an RF Government Decree on the Structural Transformation of Industry's Defense Sectors.

On behalf of the Defense Enterprise Assistance League Presidium

[Signed] A.N. Shulunov

Industry Leaders on State, Future of Defense Sector

954F0127A Moscow *SEGODNYA* in Russian
13 Oct 94 p 9

[Article by Leonid Kosals and Rozalina Ryvkina: "No State Policy in the Military-Industrial Complex"]

[FBIS Translated Text] Two polar viewpoints of the VPK [military-industrial complex] have developed in Russian society. Some believe that practically everything that is good in Russia is concentrated there—the greatest intellectual potential, the highest technological level, the capacity to produce world-class goods, and high competitiveness. In this view, the militarization of society is considered normal and even good. Now this viewpoint at times is carried to absurd lengths, when the VPK is interpreted as a source of many goods and the growth of the living standard. For example, the

party platform of Zhirinovskiy asserts that stopping conversion could improve the living standard of people in Russia by a factor of nearly three.

Others believe that the VPK is a "black hole," absorbing a gigantic volume of resources for production of goods that are dangerous to mankind, and is the chief obstacle to the entry of our country into the market. They represent the VPK as an economic parasite of society, which must be reduced to a minimum, if not to zero, since after the end of the Cold War Russia has no external enemies.

These views have deep social roots. The first is based on the USSR's traditional ideology of honoring the military sphere and its priority over many (if not all) social spheres. In this ideology, military might is viewed as the main sign of a great power, and the chief source of its prestige in the world arena. The second, opposite viewpoint is a reaction of society (mainly the intelligentsia) to the supermilitarization of the Russian economy. Many considered the enormous Soviet VPK a waster of resources and the main cause of the ineffectiveness of the Soviet economy. This viewpoint, of course, had no effect on the policy conducted by the CPSU.

In a period of market reforms, these two viewpoints have agreed on one thing—the VPK and the market are incompatible. For the success of reforms, conversion of all military industry is needed. But as we know, conversion is not proceeding. We have reached an impasse: It is impossible to reform the economy while retaining the defense sector inherited from the USSR, but we are also failing to convert it. The state is sharply reducing state orders and is not financing even what it does order. We have asked experts to comment on this situation.

V.M. Chepkin (General Director of the "Saturn" NPO [Scientific Production Association]): The quantity of tanks, planes, and weapons that we once produced is not necessary. We need to redirect our basic efforts toward the intellect, and produce high-quality goods. But we, on the contrary, have lost scientific-production jobs and continue to push serial production: things, things, things. Serial production must be reduced by at least half, and perhaps by two thirds. The intellectual sphere, the NII [scientific research institutes] of course require reform. We need to create hard competition in this sphere. But an influx of money is also needed. The Americans now invest half of their money in development, and the other half in acquisition of equipment. But we are creeping into our former hole, where we were before. Before this was necessary for the report, for the check-off; there had to be growth everywhere. Things aren't supposed to be for show now, but circumstances force us to continue the old line. Otherwise

enormous cities (such as Novosibirsk and Perm) might go unemployed. This is a terrible problem, but if we want to have a real military industry, then we have to invest the bulk of our money in intellect, and this isn't being done right now.

Now about the situation in the branch. It is grave. I believe that the main cause is the expectation of someone else's help. The strictest discipline operated all the time in the military industry. People got used to obeying orders. But now, we have to think with our own heads. We have to make independent decisions and take responsibility for them. That is an unbearable burden for many. Now there are 30 to 35 percent such "immobile" directors in the branch. Another 30-40 percent are beginning to stir, while only a little more than a fourth have adapted relatively successfully to the current Russian market.

Only the market can bring about a radical improvement in the state of affairs in the branch. But this requires quite clear and stable laws, game rules that operate for at least tens of years. This is the main thing. If we have them, we will do it all ourselves. And we shall create the financial industrial groups. Not on the basis of formalistic organizational restructuring, but on the basis of real technological ties and economic interests.

Of course laws alone are not enough. A constructive state policy is required for normal operation of the branch. Now there is no policy at all. All sorts of bureaucratic structures are rising up over the weapons trade, over the licenses. There is no work, but the wall of paper is swelling, a paper wave surges over us. Many groupings tug on the blanket, but the blanket is small, and they are trying to tear it apart. And in this porridge the main thing is lost. But I, for example, do not know and do not understand if the state needs our company or not.

A.N. Shulunov (Director of the GosTsNIIRTI): In comparison with other branches, the situation is the most grave in the defense complex. Even those enterprises which last year had the opportunity to live at the expense of export are now on the brink of collapse. The arrears in wages is 3-4 months, and the social situation is tense. Among machine builders, we are behind by roughly a factor of 1.3 in terms of pay. The most difficult situation is observed in electronics: there the average wage is 90-95 thousand rubles. The highest wage is among ship-builders—190 thousand.

There are several causes for this situation. One of them is that there are too many VPK enterprises. The percentage of surplus enterprises is around 60 percent. Long ago (last year or the year before) we should have said: "Go on boys and do what you want." That this was not done is the result of a whole chain of tragic

errors, perhaps even malicious intent. Now many military people are thinking: "Perhaps in 3 years we will renew production." But they can't count on that. The fate of each plant must be plain right now.

Since the number of defense enterprises is too high, it is not surprising that the state is not meeting its obligations to them. For example, the Cabinet of Ministers reached a decision on December 21, and wrote us a products list for a military order consisting of 12 thousand item names. But after a long delay (the Duma and the Ministry of Finance were pondering) the same government failed to pay for that, but gave 5.5. times less. But only in July was the decision made to correct the products list and to throw out half. We had already bought the materials, and then at mid-year they tell us: "We don't need that." And they don't even pay us for what was left. Today the debt of the Defense Ministry to the defense complex for state orders is 2.4 trillion rubles, plus another 700 billion in unpaid advances.

What would it be better to cut? We have to devise specific criteria. If we want to enter into the international division of labor, then we have to support the competitive industries first of all, and mainly the aerospace complex.

By our estimates, around 150 billion dollars were needed to convert the entire defense complex in 1992. In these 2.5 years, according to our data, around 120 billion rubles have been allocated in 1992 prices. The financing of conversion proceeds unevenly. In 1992 it began in July, in 1993 in August, and only those jobs which were started in 1992 and completed in 1993 were financed. Some jobs we began and abandoned, and now after waiting two years are again starting. In 1993-1994, around 200 billion rubles were spent in the first quarter, while not a single kopeck has been allocated in the 2nd and 3rd quarters. I think that the process of conversion today overall is uncontrolled on the part of the government. But then, it is generally uncontrollable. Hence it is clear why now around 400 enterprises have come to a standstill, and around 1.5 thousand are working a shortened work day.

Privatization has brought hardly anything to any collectives. The production drop and structural perestroika have resulted in the enterprises becoming bankrupt, although around 40 percent of the enterprises of the defense complex have gone public, and about another 40 percent will be privatized (20 percent will thus remain state enterprises), but these figures are relative. Today it doesn't matter at all if you stick with military or civilian areas. Even enterprises which are filling 100 percent state orders are going private.

A serious situation has developed with respect to assimilation of new technologies. Today not only are we not assimilating new military technologies, we are even losing what we had two years ago.

People are leaving the VPK in droves. In the last year science has lost around 600 thousand people, and production around 1 million throughout the VPK. Today it is mainly young people who are leaving. A colossal outflow is going abroad. In the last year around 70 thousand highly qualified specialists have gone abroad. The U.S. Emigration Service has adopted special legislation creating a favorable regime for workers from the Russian VPK: they can have 10 years residency, and then a green card. The brain drain may greatly undermine our future.

The level of unemployment is growing. The hidden unemployment rate is roughly 10 percent. In a month it will apparently reach 30 percent. This will have catastrophic effect on the city-forming enterprises.

About bankruptcy. Potentially 90 percent of enterprises, even those filling state orders, are bankrupt by the indices which we have today (liquidity, ratio of loans to assets, etc.). I think that the indices are too strict. It is hard to determine the actual state of affairs from them.

There is no real state policy in the VPK sphere. Instead of it we have an undisguised, insolent power struggle. Essentially today not one new department has found its place, be it the Committee for Industrial Policy, or the Committees for Defense, for Machine-Building, for Metallurgy, or for Chemistry. We have formally handed over authority to the directors of the enterprises and have made some superstructures in the form of committees. But the committees must clearly understand what their function is: They must either conduct structural perestroika, develop foreign-economic ties, or do something else. But they get involved in everything they like, and have no government functions.

P.V. Miodushevskiy (Deputy General Director of TsAGI [Central Aerohydrodynamic Institute]:) It must be acknowledged that there is no reasonable military doctrine and no reasonable concept of conversion. Orders continue, and thus old technology that no one needs and which is becoming harder and harder to sell even abroad continues to be produced. It is not only that there is a drop in weapons demand in the world right now; we also have to offer items that will be bought.

If enterprises could decide for themselves what precisely they should make and whom they should sell it to, we wouldn't have this situation. It is often said that now everything is permitted to the entrepreneurs, so

they have to extricate themselves from the hard situation in which they find themselves, but this is not correct; nothing is permitted to them. Everything that is done is being done underground. The state administrative organs are restrictive, and this hits the enterprises hard. Three years ago, much of what now is virtually prohibited (for example, changing the structure of the enterprise and ownership relations) could have been done. Then with every month the situation began to worsen, and more and more prohibition orders went out. Now without some sort of global government decision it is practically impossible to do anything independently.

The directors of enterprises are often asked what is hampering them. My dear gentlemen, we are hampered by a situation in which we are separated from property and don't know how to approach it. It is no accident that many believe that the bans and excessive taxes are being used to bring the enterprises to ruin so that later on someone can use this property. Now as a result of the privatization in progress, property is being dispersed. In privatized enterprises, an enormous share is the state's while the rest is dispersed among minor contributors. As a result the enterprises are becoming the estates of groups, and often it is not clear which.

I think that now very little is being done to renew the physical facilities. Because of this, many high technologies are beginning to disappear. Here is an example. Russia has a unique technology for control of mechanisms using an electrohydraulic device of a kind that doesn't exist in other countries. It was developed in Moscow by Prof. Razintsev over a period of 20 years. But now the enterprises which produced some components of this technology have already ceased to exist. For this reason, this technology will soon disappear too. Of course some new, good things are still being developed. The problem is to support them with various measures and benefits, including through allocation of state funds. For example, support of our export of military technologies is very important. We have to ensure financing of expert contracts on terms that are equivalent to western ones, which demands the adoption of special legislation.

V.Ya. Vytebskiy (Chief of the Main Directorate of Information and Statistics of the RF Goskomoboronprom [State Committee of the Defense Industry]): In terms of drop in production, the VPK today is outstripping all other branches, and it is civilian production which primarily is dying. Here are the numbers. In June the volume of industrial production as a whole (in comparable prices) decreased by 47.9 percent in comparison with the same period last year, and from the start of the year by 41.5 percent. Here the production of civilian goods by the VPK decreased in June by 43.6 percent, and from the start of the year by 40.8 percent,

while for military goods it was 36 percent in June and 42.1 percent since the start of the year.

In order to emerge from this crisis, a clear-cut state policy is required. After all, in many questions even with a developed market it is impossible to get going without strict state control. But we do not have such a policy.

The situation in the aviation industry, which received preferential credits in the conversion program, is somewhat better. This has lasted for two years, and the program has been retained now. Thanks to it, our aviation plants have been restructured. But the situation has again run up against the fact that they have developed new civilian planes, and now there is no one to sell them to. Or rather, our buyers prefer to buy American planes, and this is already national policy. If the state allows elimination of our own aviation industry, what kind of state is that?

A.V. Grigoryev (General Directorate of the "Impuls" Scientific Production Association): The VPK no longer exists in the old customary sense of the words; it is "eroded." On the one hand, no one is directly running us from the center any more, and no one is following every step. This is good, because even in the VPK there must not be a hundred-percent system of state regulation. On the other hand, there are no longer the former horizontal ties between enterprises of the VPK branches. Today we really deal only with those with which we are directly working. For example it is much easier for me now to deal with the civilian plant "Vodopribor" or the "Gimpromez" association than with many enterprises of the VPK. This is natural because we work in the same mode of market philosophy. At the same time, many enterprises of the VPK are preaching a state form of property, so my contacts with them are fewer. But still some (like our enterprise) have actively begun privatization and conversion. For example, in 1991 our production of military goods was 96 percent. Now it is 28 percent. Our colleagues from the United States are surprised that we can survive at all under such conditions.

Today the old system of financing has largely been retained. There is still a very large military lobby in the financing system, and as in the old days, everyone gets a share.

As for conversion, it should be stimulated not by directive or by direct legislative statute (a law on conversion or something else), but by the conditions that the state creates in order to direct the actions of the enterprises in a specific direction. In this case, toward conversion. We have stimulated our own structural subunits, granting them broad independence (essentially they are like small unofficial companies,

although they do not have a "juridical person"). A similar idea is required at the state level too. Don't force us to produce medical instruments, and say deliver something somewhere at such-and-such a price. We will handle that ourselves for our survival. But as soon as they begin giving handouts to groaning enterprises, the whole idea of reform is destroyed. In this regard, I agree with the current government—you can't give in to lobbying groups. But it is also impermissible that the baby be thrown out with the bath water. For conversion it is necessary to create the economic conditions, and we ourselves will find what direction we should move in, and what we should fill the market with. Ours is boundless.

Y.A. Fomin (Deputy General Director of the "Soyuz" AMNTK). The economic situation in our branch is quite grave with regard to financing. This especially affects enterprises like ours, where the state order comprises the bulk of our budget. Throughout the world the state order is very advantageous because it means stability, reliability, and weightiness. And if we proceed from these positions, of course it is more advantageous to hold onto the state order, since in the present hectic world, it provides some sort of stability. Let the financing be less than in commercial structures, it still gives us the opportunity to stay afloat. But this works only in the case when the financing is done in accordance with the rules. If the state issues the state order, then it must pay for it. If it does not want to issue it, then it is obliged to tell the enterprises that they won't receive a state order this year. Then the people will take their bearings and sail off on their own.

The threat of bankruptcy is a new problem for the branch. The scale of this is colossal. Here is the situation in our enterprise. For ten months now we have been working in accordance with contracts, but have received almost nothing. There are areas for which the indebtedness is billions of rubles. There are still debts from last year (they didn't settle up with us for state orders). So if they say today that they will not pay us this money (and we have not paid wages for 5 months now), there is nothing we can do but declare to the state that we are bankrupt.

The impression is created that the government policy toward our branch is one of complete liquidation. The state gives everyone a state order and then doesn't pay anyone. Can this be called administration?

The upshot of all our attempts to work with foreigners, to implement research and development has been that we realized they don't need our research and development. Mutual cooperation ended at the stage of signing a statement of intentions. Subsequently we learned

that they were successfully developing our ideas independently, using their own high technological capabilities (for example, for engines of a specific class). This was economic espionage.

About privatization. Although nearly everything is being privatized, this is not doing much for us, since we enter into it without capital. For example, marketing shows that we need to develop a business-class plane with specific parameters. But no one has the money. The aircraft builder cannot develop the plane with his own resources, and there are no internal investors either. The turn-around time of the capital is around 10-15 years, and that is not advantageous for them.

D.A. Lukyanets (Acting Deputy Director of the Scientific Research Institute of Organic Semifinished Products and Dyes): Now many military Scientific Research Institutes (including ours) have been converted. Our collective could be pulled out and put somewhere on defense tasks only by force, say if the Motherland ordered. All things being equal, we will not go back there. Of course if it were financially advantageous, then many would think again. But the financing must be truly significant, and judging by the present situation, it will not be in the immediate future. Besides this, specific conditions and a defined infrastructure are needed in order to perform military research and development. For instance, acceptance, a test department, special documents, etc. All that used to exist, but it collapsed, and we can't recreate it. The infrastructure is also an important factor, along with the collective. It takes a lot to meet the demands of the military. Just the testing laboratories cost a lot. It would be very hard to create it all again.

As for financing, ours is part state financing and part market financing. This is close to the optimal situation. If only this line were constant. Then maybe we could adapt ourselves to the game rules. For example, everyone has already decided that there will be hardly any financing of military research and development. But recently, I know, there were orders of the defense plan in certain organizations, more for support, of course. I view them as money down the drain. Here we have to play by specific rules: Either you have released us to the market and we adapt ourselves to this as we can, or you give us some support, but then this should have been practiced from the very start. But they waited until the collectives had collapsed or switched over to something else, and then began financing. As a result money went to those who had still not switched over to new areas and who should have—and this would be natural—cut back. Although it would be very naive to expect anything from this activity. In the best case these people might somehow push through their

old developments. But often there is nothing to push through, they simply repeat old or even someone else's developments.

V.I. Zhiltsov (General Director of the "Submikron" Scientific Production Association): We do not have a market economy today, although we talk about one. For example, before the share of energy suppliers amounted to 3-5 percent of cost. Today this figure is already approaching 50 percent. If you consider value-added tax as well, and the tax on profit and such, the producer is left with kopecks—5, 7, or in the best case 11 percent. Although a profit of no less than 15-18 percent is needed in order to live more or less normally. When the state dictates prices for energy suppliers, that is not the market.

As you know, military orders are down sharply now. A very deep arms cut is in progress. And instead of the global systems that we once worked on, now something entirely new is under way: precision weapons and electronic warfare weapons. We have had to restructure. For example, in Zelenograd at two enterprises the export of microcircuits for watches and calculators is up sharply. We offer very cheap circuits, even in comparison with Japan and Korea. Taiwan and Hong Kong are now buying these items from us and creating joint enterprises.

At the same time, in connection with all the market reforms, the VPK is dropping. The system for us in electronics has always been the institute and the plant with it. When reform started, they began to squabble. The institute was mad at the plant because it eats up part of the resources, so the institute declared its autonomy. In turn it has always been hard for the plant to work with the institute because of experimental models, errors in documentation, small lots, etc. For this reason the plant also intends to separate from the institute. We had a wonderful experimental plant in Zelenograd, but it has now gone over to "Gazprom" and has begun to make gas meters. That means mass production, and there is a demand. But as a result technology has been destroyed and discipline has dropped sharply. Today, when society is in ruins, there is a drop in production, and the worker goes to work only *pro forma*. I recently spoke with a fitter whom I have known a long time. He says that he is busy only 15-20 percent of the time. Thus he is losing qualifications and skills. The same goes for engineers.

To stop all this we need state decisions, but today contradictory documents are appearing. Even the writing is repetitive and vague. Evidently, all of this is being prepared by people of a different level of competence. Today they publish, tomorrow they cancel—it is really not serious. I have had occasion to work with foreign partners. They enter all of our ukases and

decrees in a computer and then ask: If I do such and such, what is the degree of risk? The answer is 100 percent. So all of these ukases contradict one another. Who's going to invest money when the risk is 100 percent?

I think that given the independence of the VPK enterprises that we have today, and given the elements of the market to which we are already starting to become accustomed, there is no need to pile up a super apparatus. The apparatus must work at strategy. Task number one must be an arms program in accordance with defense doctrine, and then organization of cooperation for accomplishment of individual assignments. But the rest must be left to the enterprises. The enterprises know better what they need. And besides, dictate is associated with responsibility. If you have undertaken to dictate my actions, then you must help, and get involved in the problems. But today the bureaucrats themselves won't agree to that.

At the same time, in something like the defense complex, the status of the director of Goskomoboronprom must be higher. At least he should have the rights of a deputy representative of the government. As it was in the USSR: the Chairman of the VPK was simultaneously the Deputy Chairman of the Council of Ministers. There were a great many decisions made by that same Maslyukov, the VPK Chairman. He had some resources at his disposal and manipulated them.

[Kosals and Ryvkina] What future awaits the VPK enterprises in the near term? Two variant developments of events are possible. The first variant is that in the near future (perhaps even this autumn), the greater part of VPK enterprises will stop due to inability to pay. The result will be a sharp politicization of collectives, their promotion, along with economic demands, of political slogans calling for the resignation of the government and early elections for president and parliament. Implementation of these demands in principle might bring people to power who would be oriented more toward strengthening the defense capability of the country, and who would be more sympathetic to the needs of the VPK.

The second variant is that in the near future only 20-30 percent of defense enterprises will go bankrupt and stop, and it would make no sense to support them. The others could become completely competitive with the corresponding state support and internal restructuring. But if there is no state support, then in the estimates of directors, even the best Russian defense enterprises would completely lose their potential in the immediate future. Without state support, only a few would survive: by the most optimistic estimates, no more than 10-20 percent of the enterprises. In the second variant the VPK would not be a source of social explosion,

since only a policy adjustment is needed to realize it, and this is something that the current authorities are in principle capable of doing.

Which of these predictions will come true depends largely on the conditions existing outside the VPK—the general economic situation in the country, changes in living standards and the scale of unemployment, the involvement of Russia in foreign conflicts, and the activeness of the non-parliamentary opposition. However, a reasonable state policy towards the VPK, which would be coordinated with influential groups in it, and would be proclaimed and realized in the immediate future, might vitally change the state of affairs for the better.

Institute Head Outlines Shipbuilding Sector Woes

954K0124A Moscow NEZAVISIMAYA GAZETA
in Russian 13 Oct 94 p 6

[Article by Valentin Pashin, corresponding member of the Russian Academy of Sciences and director of the Central Scientific Research Institute imeni A.N. Krylov: "Will Russia Remain a Great Maritime Power?"]

[FBIS Translated Text]

Besides Rockets, We also Made Excellent Ships

The TsNII [Central Scientific Research Institute] imeni Academician A.N. Krylov (St. Petersburg) is the main scientific center for domestic shipbuilding. Its specialists participate in the solving of almost all the main questions in the field of military and civil shipbuilding. The ways for solving the many problems of the Russian fleet have been outlined in the "Program for the Revitalization of the Russian Fleet," developed under the institute's leadership. Recently, the largest center for domestic and world shipbuilding science—the Central Scientific Research Institute imeni Academician A.N. Krylov—completed its 100th year.

At the beginning of the 1990's, domestic shipbuilding rivaled the U.S. shipbuilding industry in the volume of production of basic products. Two-thirds of the tonnage of the world's military shipbuilding was produced at the two countries' shipyards. The scale of shipbuilding in other countries was at least an order of magnitude more modest.

The country's civil shipbuilding was traditionally among the world's top ten, however, it yielded in tonnage to the main suppliers of civil ships—Japan and South Korea.

The country's shipbuilding industry was a diversified concern with a work force of almost a million persons. This enormous complex produced annually around 300 vessels and ships of more than 100 types, several

thousand diesels, turbines, torpedoes and mines, and a wide range of components—from underwater acoustics to screw propellers. Vessels and ships built at the domestic shipyards sailed under the flags of more than 40 countries of the world.

The collapse of the USSR significantly undermined domestic shipbuilding's research and production base and sharply increased the disproportions that had been sufficient previously. Left outside Russia's borders were the unique capacity for the construction of aircraft carriers and half the capacity that produced the missile cruisers and the auxiliary fleet's ships. Around 60 percent of the capacity for sea transport and fishing industry shipbuilding was left in Ukraine and partially in the Baltic States. The Black Sea plants also produced 30 percent of the ships and equipment for ocean exploration. Also left outside Russia's borders were a significant part of the maintenance and repair base for the surface fleet and for the production of underwater weapons, all of the production of gas turbines, up to 40 percent of that of the navigation equipment, 60 percent of that of the rolled steel, and many other things necessary for shipbuilding. The volume of the Russian ports' transshipping amounts to just around 40 percent of the union-wide volume.

At the same time, left in Russia were three-fourths of the total shipbuilding capacity and more than 80 percent of the planning, design, and scientific potential of shipbuilding. Currently, the problems engendered by the country's disintegration, ill-considered conversion, and accelerated transition to a market economy have become interwoven in domestic shipbuilding in a single tight ball. For shipbuilding, these problems have also been complicated by the lengthy time frame for the development of a modern ship, which can amount to 10 or more years. At present, in connection with the fact that a substantial part of the sector's science has remained unused, the reduction in the number of Scientific Research Institutes and Design Bureaus has reached almost 50 percent, while the average age of the workers exceeds 50.

It is easily understood that, given the continuation of this trend, domestic shipbuilding in the long term, in principle, will not be able to build a single complicated vessel independently. The production enterprises have also been left without necessary financing and no one will venture currently to predict how many of the more than 80 combat vessels at Russian plants, of which more than 20 are nuclear submarines, will be completed.

Under such conditions, the entire "Program for the Revitalization of the Russian Fleet" may, to a significant extent, remain on paper. The lack of financing is placing in doubt as well the development of equipment

for extracting oil and gas on the continental shelf, where Russia, in contrast to other countries, does not currently have developed fields. At the same time, around 15 billion metric tons of oil and 36 trillion cubic meters of gas are concentrated in the country's shelf. In order to develop the offshore deposits successfully, it is necessary to develop Cyclopean structures—extraction platforms and a large number of diverse support ships. The complexity of the problem of developing the shelf is comparable to the problem of space exploration and it is no accident that the enterprises with experience in advanced defense technologies are the very ones that are jointly solving this problem.

The reorientation of the shipbuilding industry to a greater degree toward the building of civil ships and equipment does not exclude at all the necessity of maintaining the proper level of military shipbuilding. A combat vessel, as one of the more complicated engineering structures, is a distinctive calling card of the country, which reflects the level of its scientific, technical, and economic potential and ensures the protection of the country's interests at sea.

First of all, the existing treaty restrictions assume the dominating influence in the nuclear triads of the U.S. and Russia of these same sea-based forces. At the same time, Russia, which, at one time, had built 120 submarines with ballistic missiles, back in 1990, in contrast to the other nuclear powers, stopped building them.

The protracted process for making a decision about ways for the further development of a strategic system, for all practical purposes has already predetermined that, by the end of the first decade of the new century, the potential of the Russian Offshore Strategic Nuclear Forces (MSYaS) may fall to the level of the French or English Offshore Strategic Nuclear Forces and will not be able to ensure parity with the U.S. Offshore Strategic Nuclear Forces, not to mention the basing of strategic nuclear submarines in the two ocean theaters. As a result, the established strategic balance, which is ensuring peace on the planet, may be upset.

The use of APLs [nuclear submarines], of which around 150 units will be removed from the fleet's operational forces by the year 2000, is becoming a significant concern of the state. The nuclear and radiation safety of the nuclear ships' construction and basing sites is one of the components of the country's national security. The state has still not realized that this is its priority problem and not just a problem of the fleet and industry.

Zaporozhye Aviation Plant Director Interviewed

954E0076A Moscow GRAZHDANSKAYA AVIATSIYA
in Russian No 10, Oct 94 pp 6-7

[Interview with Vyacheslav Boguslayev, general director of the Zaporozhye Motor Sich enterprise, by

V. Mikhaylov; place and date not given: "For Fear of Losing Their Wings. Or, It Is Up to the Drowning To Save the Drowning"]

[FBIS Translated Text] Conversion is a well thought out, well-considered program to convert industry from the military to civilian mode. It has been going on for over eight years now. The process has affected dozens of industrial enterprises in CIS countries, linked to Russia's design bureaus and related plants by a single technological chain. This chain has never had national boundaries.... But now mysterious forces have broken the chain with a new "Iron Curtain." How solid is it, and is it necessary? How can we restore links between former partners, and do we need a renewed design-industrial conglomerate? Answers to these and other questions are given by Vyacheslav Boguslayev, general director of the Zaporozhye Motor Sich enterprise.

[Mikhaylov] Vyacheslav Aleksandrovich, your longtime partner Aleksey Fedorov, general director of the Irkutsk Aviation Association, told me there is no conversion in Russia, simply a mass cessation of military orders, and enterprises that have been making military products all their lives are offered two choices—perish or try to escape the situation on their own.... Do you agree? And how are things in Ukraine in this regard?

[Boguslayev] I agree mostly. Some politicians, economists, and also journalists reporting and writing about conversion are either mistaken or are being crafty. There are more problems on this score than successes in Russia, and Ukraine, and Uzbekistan. We are all in the same position—flat on our backs. Neither the aviation plants, the design bureaus, nor the scientific-research institutes working on aviation have money. We have all had our wings clipped, and there is not much hope they will grow again.

[Mikhaylov] Today, Zaporozhye "motors" means two "whales" in aviation engine building—Motor Sich, which you head, and ZMBK, Zaporozhye's Progress Machine-Building Design Bureau headed by general designer Fedor Muravchenko. You have been working in the same "harness" for many years. Don't you recall that you developed long years of cooperation?

[Boguslayev] ZMBK developed the first Soviet-made power plants, the AI-20 propjet with a long operating life for military and civilian aircraft such as the An-8, An-10, An-12, An-32, Il-18, Il-20, Il-22, Il-38, and the Be-12 seaplane, the AI-25 ducted-fan engine for the Yak-40 airplanes, its AI-25TL modification for the L38 Czech training airplane, the D-36 three-shaft bypass turbo jet engine of high bypass ratio for transport and passenger planes like the An-72, An-74, and Yak-42; the D-18T bypass turbo jet engine with a

thrust of over 23 tonnes for the biggest freighters in the world (the Ruslan An-124 and the Mriya An-225), and the world's first D-136 shaft-turbine engine for the Mi-26 transport helicopter with a shaft power of over 11,000 hp. Incidentally, auxiliary power plants have been installed on the Yak-40 airplanes, the Be-12 seaplane, the Mi-6 transport helicopter, the Mi-8 transport and passenger helicopter, and the Mi-24 combat helicopter.

Some more figures: 17 types and models of engines are in operation in 42 types and models of airplanes and helicopters. The total number of operating hours by engines developed by ZMKB comes to over 300 million. In addition, Progress power plants are operating successfully in 60 countries.

The engine builders of Zaporozhye are always looking ahead. We are now able to re-outfit Tu-134 and Yak-42 airliners with the D-436T1 (T2) engine. It has also been designed for promising new, improved and more economical craft like the Tu-334 and the Be-200 seaplane (the first copies of which are now being developed at the Irkutsk Aviation Plant).

[Mikhaylov] Is your work being affected by the economic, customs, financial, and other barriers between Russia and Ukraine? What specific losses have you sustained as a result of this "civil strife?"

[Boguslayev] In recent years, partnership has been maintained only through personal contacts, mutual trust between companies. Those customs barriers are creating terrible problems. To some extent intergovernmental agreements have lowered these barriers; duty-free deliveries are made on the basis of general license. As for the rest, there are endless "snags": different currency rates, interest rates, taxes, duties, mutual settlements, mutual nonpayments.... As a result our products are getting so high-priced that the aircraft builders cannot buy them.

Traditionally, 90 percent of our engines went to Russia. Practically everyone who built civilian aircraft used them. It is only the fighter planes that do not use Zaporozhye engines. Moreover, components, materials, and semi-finished goods came from Russia. Once we counted up 822 suppliers, 550 of them Russian. Now these links are maintained through the incredible efforts of the manufacturer. We need one another.

[Mikhaylov] Evidently that is why the designers and manufacturers have not waited around for directives from above but have taken the initiative to join together in alliances and conglomerates that were unfamiliar in the old days. What arguments would you advance to prove the benefits of these associations?

[Boguslayev] If we heeded voices "from above" today we would have to break up according to the principles of the antimonopoly laws and divide into cooperatives and small enterprises. But what "small enterprises" could develop science-intensive products like today's aircraft engines and airliners? It is no secret that any design bureau or series plant that does not have a scientific base and authoritative partners cannot survive.

So we have come to this conclusion: Today's aircraft engines can be made only in cooperation with scientific centers and production enterprises that are ready for it today. What do we gain from this? First, we gain speed in the development of new aircraft, which is vital under market conditions. If you get to the aviation market first you can count yourself protected, to some extent, and not have to worry about tomorrow. And mainly (or in second place) we are creating conditions under which a number of scientific and design outfits come to form a single chain, a single general theme.

[Mikhaylov] The leading Russian design bureaus, in particular the Tupolev and Ilyushin people, are cooperating actively with foreign firms. Do you have similar plans?

[Boguslayev] We were working with a British firm for almost two years, but at some stage it halted and stopped. Our main goal is to work with Russian enterprises. Both Ukraine and Russia have plenty of talented scientists, famous institutes, and high technologies. We are counting on equal partnership to maintain the prestige and reputation of the domestic aviation industry.

We already have something to be proud of. For example, the D-27 engine is the world's only propeller-fan engine in its class. There is nothing to compare with it, and it is a pioneer development by our design bureau. It has gone through its bench tests. It was flight-tested on the Il-76 laboratory plane. It was developed for the new-generation An-70 transport plane. Among other features it provides high cruising speeds with a fuel savings of 30 percent compared to present engines. It can be used on the An-70, An-70T, An-180, Yak-46, the Be-42 seaplane and modified models of the Mi-26 helicopter.

Another new item is the 436 T1 engine. There was a mock-up of it at the last exhibit; now there is a working model. It is installed on several types of aircraft and is being produced jointly by three Russian and Ukrainian plants. It surpasses many foreign models in its thrust class. Our enterprise, Motor Sich, and the Progress ZMKB imeni A.G. Ivchenko, are known all over the world. Not long ago we were producing 6,000 engines

per year—more than any foreign company. Zaporozhye engines are being used in 60 countries. More than 60 percent of the products of Motor Sich are made based on ZMKB designs. We operate in the same location and work in close partnership. Motor Sich and Progress ZMKB were the first to be awarded certificates of production quality by France's Bureau Vertas and the International Academy of Quality State Aviation Register.

[Mikhaylov] Do you think the path you have chosen will guarantee the survival of Zaporozhye Motors, a world-renowned enterprise? Can you cope with the mass of social tasks that have befallen the people of Ukraine and Russia?

[Boguslayev] We are in the same fix as everyone else. People work a lot and earn little. An ordinary engineer's pay at Motor Sich is 480,000 Ukrainian monetary units, which is about 20,000 Russian rubles. That's for now. What will happen? Many people are leaving. Bright people with golden hands—naturally, commercial outfits are snapping them up. People go where the pay is better. They have to survive somehow. I do not like that new term—"survival"—is the battle between life and death. My main goal is to achieve conditions that make it possible not just to "survive" but to live normally and right.

Those politicians who crave to divide us see only the fruit of the tree and apparently do not know that there is a root system that cannot be destroyed without fatal consequences to the fruit itself. Or maybe they do know but they don't care.... People apparently realize this now in Russia and in Ukraine. And the path that Ukrainian and Russian aviation designers and manufacturers have embarked on gives reason to hope that we will keep our place among the leading aviation powers of the world.

Radiation Pollution From Tomsk Plant

95WN0015A Moscow ROSSIYA in Russian No 40,
19-25 Oct 94 [Signed to press 18 Oct 94] p 7

[Article by Galina Mashtakova under "Sore Point" rubric: "ZATO Under Number Seven"]

[FBIS Translated Text] "Mankind is doomed to technical progress. As long as his brain works, more and more new technologies will be created. And the more complex the technology is, the more potential harm it will bring for the health of the people. And whatever protective means are invented along with the technology, behind all of this is man with his head and his hands. After all, as Gennadiy Petrovich Khandorin, general director of the Siberian Chemical Combine [SCC],

joked, "all accidents happen for one of two reasons: there is no contact where it should be or there is contact where it should not be."

Tomsk Oblast has been living in a state of emergency for several years now. The leadership of the SCC is frankly irritated by the ecological movement, in particular by "dilettantish" scientists. And naturally the scientists, who certainly earn unconditional respect on account of their professionalism and their interested and conscientious attitude, respond to this leadership with mistrust and suspicion. There is no contact where it is needed!

ZATO stands for "closed administrative-territorial formation." They are invisible cities and towns that are test ranges and nuclear complexes.... These "new formations" appeared in the body of the country about 40 to 50 years ago. The offspring of the military-industrial complex, they initially inspired respectful fear because of their secrecy and obscurity: What are they doing there behind several rows of barbed wire? But this was only at the beginning. The "secret physicists" bathed in the rays of their own glory and importance for only a short time. With time they themselves and then the rest of the population of the former power realized what might be the fruits of domestic technical progress with a clear militaristic tone. The time of the hangover arrived...

...I came to Tomsk for the first time in 1986. The city seemed to me like a kind of "blockade Leningrad." Doubled over in a bitter blizzard, men dragged sleds with large milk cans and women pulled smaller cans and vessels. My local colleagues explained to me that the water from the Tom was undrinkable. To the extent possible, the people got water from springs but even they are unsafe here, in a region of cedar forests burned by acid rains. But at home, in their kitchens, they talked about another Tomsk under the number seven and hidden behind seven seals in the taiga.

It was 6 April 1993 when there was a "failure of a technological apparatus" at the radiochemical plant of the SCC at Tomsk-7. In this apparatus, they were carrying out an operation to prepare to extract a uranium solution. There was an explosion with destruction of part of the building and the discharge of radioactive aerosols to the environment. The radioactive trail extended to the northeast from the SCC and crossed the northern motorway 28 km from Tomsk. As of 6 April, the strength of the dose of gamma rays on the contaminated section of the road reached 400 microroentgen/hour. It was 120-150 after decontamination. On the international scale of nuclear events, the accident was rated as a "serious incident." Initially the discharge at Tomsk-7 was estimated at up to 500

curie, then at 41, and the last figure was 115. At Chernobyl (for comparison), it was 50 million curie.

Nevertheless, a panic arose. The mistrust and fear that had developed over the years did their work. The flight of foreigners provoked "bottlenecks" of compatriots at the airport and railroad. In Kemerovo Oblast, they confused microrentgens with milliroentgens and they confused the Chernaya Rechka, where the discharge went, with the stream Bolshaya Chernaya on the border of the oblasts. There was a great deal of haste and precisely this showed the extent to which 500,000 citizens of Tomsk can be fully justified in considering themselves hostages of technical progress in the physical sense of this word. For the ancient university city of Tomsk is located just 12 km from the largest nuclear facility in Siberia—the SCC—which is involved in the production of weapons-grade plutonium, uranium, and transuranic elements. It includes a whole series of production processes that are potentially dangerous to the population and environment.

The city has one one single-track railroad, one motorway with the only bridge across the river Tom, and a small airport with a limited capacity. No comment is necessary, as they say.

It was precisely for this reason that the administration of the city, scientists and teachers at Tomsk higher educational institutions, medical people, and the public from various ecological organizations sounded the alarm. All of them are coming out in a single front in the fight against Tomsk-7, which has been renamed as the city of Seversk in honor of the victorious glasnost. On this side, the indisputable leader is Aleksandr Martynovich Adam, chairman of the oblast committee on ecology (he is deputy head of the oblast administration). On the other side of the ecological barricade is Professor Gennadiy Petrovich Khandorin, general director of SCC. And behind him is the Ministry of Atomic Energy of Russia and...technical progress, which cannot be stopped.

The fight developed around two still-unbuilt facilities at the SCC—a nuclear station (a joint Russian-American venture) and a depot for dismantled missile warheads brought here from throughout the country.

From a conversation with Valeriy Konyashkin, assistant to the chairman of the oblast committee on ecology:

"...They are now intentionally getting us used to the fact that the depot must be built because the 'materials' have already been delivered and they are not being stored properly. This is blackmail. If they begin construction of the depot now, five or six years will pass and the 'materials' will still be stored...."

From a conversation with G. Khandorin: "It is my profound conviction that the 'greens' are working to crush the nuclear industry in Russia.... They want to listen only to themselves and are sowing panic.... This situation is more political than technical...."

Under the treaties on nuclear arms, we are removing warheads stuffed with plutonium from combat missiles. At the same time, however, we are continuing to "cook" plutonium for new warheads at at least three places—at a mining and chemical combine (at Krasnoyarsk-26), at the "Mayak" Scientific Production Association (Chelyabinsk-65), and at the SCC. There is rather reliable information that the stocks of weapons-grade plutonium in Russia amount to more than 140 tonnes, which is one and a half times the corresponding stocks of the United States. And how are these tonnes stored? As in Seversk? After all, a small critical mass of plutonium-239 can lead to a chain reaction—in other words, to a nuclear explosion in the wastes if there is a violation of the rules for their transportation and storage. Today the situation is such that a terrorist can seize a depot with containers (in which no one knows whether there are one, two, or three warheads) and...dictate his terms to the entire country. Thank God no one has yet thought of this and the facilities at the SCC are guarded properly. For example, they did not show me anything other than the site where the wastes of all categories of activity from the so-called chemical-metallurgical plant (facility No 25 in the local vernacular) found their final resting place.

From a conversation with Professor Leonid Rikhvanov, department head at Tomsk Polytechnical University:

"...The water supply is a problem for Tomsk. About 40 million cubic meters of radioactive wastes have been pumped into the ground and this is continuing. This is 17 km from the test range: in one section they are pumping and increasing the pressure but in another it is the opposite—the pressure is low and there are craters of depression.... They tell us that there is no migration of water and everything is staying at the test range and will never go anywhere. But geologists and hydrogeologists are asserting the opposite: there is no protective layer. They pump it into the lower layers and we drink from the middle layers...."

We need immediate and serious investigations. For we already have the sad experience of Krasnoyarsk-26, which hardly anyone knows about. They also decided to build a burial ground on the other bank of the Yenisey. The tunneled under the river at two levels. Underneath was a pipeline for wastes and above that the tunnel was for motor transport. Scientists showed the absurdity and danger of this measure. The result of this fight was the suspension of construction and the

site was closed. Now the tunnel under the Yenisey remains as another monument to domestic mismanagement.

From a conversation with V. Konyashkin:

"...There is an international agreement on the nonimportation of nuclear wastes from abroad. And no country accepts these wastes. Then somehow they were able to get an amendment through the Supreme Soviet under which these are not wastes but secondary raw materials...."

It is a matter of deliveries by the firm "Kozhema" of spent fuel from a French nuclear power station for enrichment at the SCC. Under the contract, the enriched product is returned to the home country and wastes from this production process remain here, at Tomsk-7, or Seversk, as it is now called.

From a conversation with G. Khandorin:

"...The Europeans are catching up with us in the technology for the separation of uranium isotopes and enrichment of the uranium product. We can lose orders. Yes, the money from "Kozhema" goes directly to the SCC. And every entrepreneur has the right to receive money for his work. It is not the oblast center that is receiving the money and this is disturbing them...."

It seems that the SCC has already lost one order. The SCC offered its services to the renowned west German firm Siemens for the reprocessing and modification of its uranium materials, which, in the words of G. Khandorin, had not even been irradiated. The deal was made but "someone had to ruin everything" and an article appeared in DER SPIEGEL to the effect that Germany was sending wastes to Russia and it is forbidden to bring in wastes.

From a conversation with G. Khandorin:

"...The Germans are now demanding confirmation that the people are working on their material safely. I told them to go to the devil! That is too much trouble. It is not your business what they do in Russia. We are giving you your material. If you do not like it, go to hell...."

Gennadiy Petrovich thinks that a "competing firm" interfered with their relations with Siemens. And these nifty Tomsk "greens" regularly interfere in the relations of the SCC with American atomic scientists. In the opinion of G. Khandorin and V. Mikhaylov, minister of atomic energy of Russia, a nuclear power station needs to be built at Tomsk-7. And in response to the objections of the "greens" that it is impossible to perform a Russian-American experiment precisely here, they say that the reactor is not experimental.

Under their plans, a reactor of the new generation will simply be modernized. After all, one must do something with the plutonium produced by our country and by our American colleagues. And there is just one way to get rid of plutonium—load it into a nuclear reactor and burn it. Tomsk has an urgent need for electric power. It meets 75 percent of its needs at the expense of neighboring oblasts. This is expensive. The oblast enterprises are becoming uncompetitive. It would seem that it would be better for them to fire up a new reactor with dismantled warheads and thereby obtain cheap energy. But no, the ecologists stood like a wall.

They are not against technological progress. And I dare say that their goal is not to put an end to domestic nuclear energy. They and the population of Tomsk are concerned only about how safe it will be for them to have such a "gift" from America next to them (the United States is prepared to finance the construction of the nuclear power station at the SCC).

Because of the lack of federal financing, no measures have yet been taken for the social protection of the population living within a 30-km radius of the SCC. There is no possibility of laying another railroad track from the Transiberian Line through Tomsk and there is no possibility of improving the motorways and establishing the necessary stock of the means for individual protection, medication, and emergency food supply. The government and the Ministry of Atomic Energy of Russia must take the necessary measures and do everything that they can to ensure the safety of the people living in an area larger than some states. Otherwise who will benefit from the technological progress that has so generously spread its wings over the ZATO under the number seven, now called Seversk?

MIASS Rocketry Center's Work Discussed

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in Russian 27 Oct 94 p 6

[Interview with Igor Ivanovich Velichko, general designer of the Academician V.P. Makeyev Design Bureau State Rocketry Center, by Vladimir Gubarev under the "Only in ROSSIYSKAYA GAZETA" rubric; date, place not given: "'Unknown' Rocketry Center"—first paragraph is introduction]

[FBIS Translated Excerpts] Powerful submarine-launched weapons have been produced in Miass for a long time. Now this is no longer a secret. [passage omitted]

[Gubarev] Only a "narrow circle" knew about you. And suddenly you became the State Rocketry Center.

[Velichko] Hard times have arrived. Very little attention was devoted to our main research projects. On the

government's part, you understand. The impression was formed that a powerful and well-armed submarine fleet with modern missiles is not needed.... Then we decided to raise the status of our own collective ourselves. We came up with a number of proposals for the government and the president, showed what we could do, and, naturally, asked for support. Temporary support—I want to stress this because we knew that through new areas, specifically conversion, we could firmly get onto our feet.... [passage omitted]

[Gubarev] Is it not unfair that Viktor Petrovich Makeyev is less famous than Korolev, Yangel, Glushko, Barmin, and Chelomey? They started together but they had greater glory, didn't they?

[Velichko] Our area of rocket technology was more secret than others. That is one reason. The other is that a whole series of solutions were so original that the Americans did not have them, and this in turn "intensified" the secrecy. Another peculiarity: All other collectives were engaged in space projects besides combat projects. Makeyev had only one passion. This was justified, the collective could not "spread themselves too thinly," people were always working flat-out, to the limit. Fundamentally new technical solutions had to be implemented in a very short time scale. Firms involved in space were in the public eye, as it were, and their collaboration with the public became closer. In addition remoteness also played a role—in our country it had already become the case that the further from Moscow the less well known.... But specialists were, of course, well informed. The first intercontinental missile launched from a submarine. That was a really major event. Both the original flight correction and the unique and highly effective operating conditions—we were the first to find and develop all these technical solutions, and it was quite natural that they were kept under wraps, that is to say classified considerably higher than in other firms.

[Gubarev] So, has the situation now changed?

[Velichko] We are trying to say as much as possible about Viktor Petrovich Makeyev. It is 70 years since he was born. We are holding a scientific and technical seminar and preparing a book of memoirs. Undoubtedly our people, the people, should know about the outstanding designer and scientist—he deserves this no less than our other designers.

[Gubarev] As is known, several submarines have sunk. Your missiles with nuclear warheads are still down there. Did you envisage such accidents?

[Velichko] Of course. There are multiple safety systems and they are reliable enough. This applies to both

missiles and the nuclear warheads in them. There is, of course, some danger but the fears have been greatly exaggerated.

[Gubarev] I do not understand: How come you are the only center supplying our submarine fleet (incidentally, it is well known that we are inferior to the Americans in this sphere) and you are guaranteeing the strategic equilibrium in the world, especially now that "Yuzhmash" is located outside Russia, and suddenly you are in a critical state?

[Velichko] Such is the general situation in the country. The entire defense complex is in a grave situation. Although to be fair I must note that together with the customer—the Defense Ministry—we are still managing to obtain some support. With incredible difficulty, but we are getting it nonetheless!... In spite of everything we continue to work—our responsibility to the people is too great and we never forget it. Unfortunately priorities have not been fully determined, and the attempt to "bury" all areas of the defense complex is leading to a situation whereby both secondary and the most important areas are dying off.

[Gubarev] Let us reassure society. As we know, "ground" missiles are not being produced—"Yuzhmash" is located in Ukraine. Is everything fine with "sea" missiles at least?

[Velichko] All our cooperation partners are Russian. We continue to work. The Americans are "helping".... During talks the "disarmament blow" fell on ground complexes, the Americans are saving their submarines, realizing that they have numerical superiority in this sphere. Thus, the center of gravity has shifted to the fleet, and in order to be on a par with the Americans we must develop it.

[Gubarev] It would seem that you must be rolling in money?

[Velichko] In normal conditions, in a normal economy—yes. But real life is different, we ourselves must get weaving, so we are trying to create fundamentally new areas which have nothing to do with the country's defense. If the collective had studied space in the mid-seventies it would have been a great support now. But we are nevertheless trying to make up for lost time. We started from scratch. We had an idea: To make a commercial launcher based on "sea" missiles. Of course, putting facilities into geostationary orbit is no big deal but nonetheless there is a "niche" for our complexes. They are low-orbiting facilities, and now there is a very great need for them, and such facilities are being produced in many countries. We are directing our attention toward them. We are trying to entice consumers and customers by offering original and cheap launch systems. We bring the launch site

close to the customer or consumer. Very interesting solutions have been found.

[Gubarev] But aren't the locations of space centers known?

[Velichko] We do not need them!... Let me cite one example. A missile is delivered to the start area by ship and released into the sea. It is like a float—it does not need a launch system, the ship retires to a safe distance. The launch is carried out. And this is no small item—the missile is on the order of 100 tonnes! It takes an extremely sizable payload into orbit. An original project, don't you think?

[Gubarev] Indeed!

[Velichko] It is very attractive to many. We have already found partners which are trying to get orders for such work for us. Incidentally, to be fair I want to note that the idea for such launches belongs to the Americans, but they were unable to implement it. We can. I think that in itself this fact says a lot about the Academician Makeyev Design Bureau and its collective.

[Gubarev] Does a tough competitive struggle lie ahead of you?

[Velichko] It has already started.... After all, a ship can take a missile to the equator or any other point and carry out a launch from there. It is much cheaper than "ground" launches in certain conditions. That is why we are feeling resistance even now, the space market is crowded and it is not easy to penetrate it. But we are not giving up. We are making another missile to be launched from an aircraft. It is a little lighter than a "sea" missile but is nonetheless extremely effective. This project is being carried out on the basis of new technologies—one of these missiles of ours is in the arsenal, and we are trying to make maximum use of this experience.

[Gubarev] As far as I know the idea of combating dangerous space objects originated at the Makeyev Design Bureau. I get the impression that you are attracted by unusual projects.

[Velichko] I repeat: We want to work in space. For a number of reasons the direct route there is closed to us. For instance, we participated in a competition to develop a new heavy space missile for Russia. But unfortunately politics and lobbying play too big a role in such competitions, and we are so far away from the center.... That is why we are trying to utilize our potential in those spheres of space where missile technologies are of crucial importance—where the fate of a project depends on them. It was no accident that the idea of a "space interceptor" originated in Miass. We

have great experience of working with Chelyabinsk-70, and this particular federal center's "articles" are being installed in our missiles. A "space interceptor" means protecting the Earth from dangerous bodies—asteroids, comets, and large meteorites. There is a possibility of creating [sozdaniye] such a system, and that is why we proposed that this problem be discussed at an international conference in Snezhinsk. The date for it was fixed even before the discovery of the Shoemaker-Levi comet, which attacked Jupiter in summer. Without doubt the catastrophe on Jupiter attracted special attention to the meeting of scientists and specialists in Snezhinsk. We delivered a report there in which we made quite specific proposals on developing an "Earth space shield." The Americans who came to the conference with Edward Teller are more concerned with studying the effect of nuclear devices on asteroids and considerably less with studying the actual delivery system, that is to say the "space interceptor." The Russian specialists made a comprehensive proposal: The Snezhinsk people showed their potential to develop nuclear devices and we proposed realistic projects for space interception systems. We are trying to tackle unusual and interesting projects—the collective has every chance of doing so.

[Gubarev] Is your notion of the vogue word "conversion" acquiring a different meaning?

[Velichko] Not so primitive as before!... At one time, under the Ministry of General Machine Building, our enterprises were instructed to produce equipment for the food processing industry. Right now we are making two automated lines to produce children's food—several original solutions were found here, yet the purpose of "conversion" is not to reduce modern design bureaus and enterprises to solving simple tasks but something else: To find fundamentally new ways of using military technology for peaceful purposes. The defense industry has accumulated vast scientific, technical, and technological potential, but it must be used assiduously, sensibly, and effectively. Not primitively but effectively....

SECURITY SERVICES

Coast Guard Commander on Anti-Poaching Action in Far East

954Q0049A Moscow ROSSIYA in Russian No 40,
19-25 Oct 94 [signed to press 18 Oct 1994] p 7

[Interview with Vice Admiral Nikolay Nikiforovich Kudinov, commander of the Coast Guard of the Border Troops of Russia, by Andrey Zhdankin, Shikotan Island-Moscow; date not given: "The Fishing

Season, the Fishing Season, the Fishing Season... The Lights of Hokkaido Burn So Alluringly"]

[FBIS Translated Text] Operation "Fishing Season-94" which was conducted for several months in the Far East ended in September. The need for such an operation was enormous: For many years during the fishing season poaching was universal, doing damage to nature and the economy of Russia estimated by specialists at R20 billion a year.

Where does the national wealth go? For the most part to the neighboring Japanese island of Hokkaido. The risk is economically justified: A kilogram of live crab is worth \$50 or more.

There is a brigade of coast guardsmen stationed on Shikotan, one of the islands of the South Kuril Archipelago. Our correspondent was there in late September. At the same time, before "Fishing Season" ended, Vice Admiral Nikolay Kudinov, commander of the Coast Guard of the Border Troops of Russia, visited the brigade.

From ROSSIYA files:

Nikolay Nikiforovich Kudinov, vice admiral, 48 years old. Has been commander for a year. Served largely in the North and Far East. Married, with a son and a daughter. The son is studying at the Pacific Ocean Higher Naval School. The commander recently became a grandfather—twin granddaughters were born.

[Zhdankin] Nikolay Nikiforovich, to what degree has the number of violations of the border and economic zone declined as a result of operation "Fishing Season-94"?

[Kudinov] In the South Kuril area there are hundreds fewer violations. For example, in 1993 there were about 8,500 reported, but this year this indicator fluctuates around 150.

We were not trying to apprehend as many offenders as possible. The operation's basic task was to prevent violations of Russia's legislation on the state border and to protect economic interests. The channel for smuggling fish has been closed and monitoring has been established not only of foreign but also of Russian ships. Local authorities link the unprecedentedly abundant salmon run this year with precisely this operation.

[Zhdankin] What figures can be used to express the expenditures for conducting it?

[Kudinov] In my opinion there is no use quoting figures, since in practice the operation was conducted within the ordinary framework of protecting the border and economic zone. No additional forces from our side were enlisted.

[Zhdankin] This year the border troops began to use weapons against offenders. Why was this not done before?

[Kudinov] By virtue of different circumstances, but above all because of the fear of responsibility and the enormous volume of "paperwork" required to explain all circumstances after weapons are employed. We have granted the commanders of ships, planes, and helicopters the full right to employ weapons, I emphasize, in strict compliance with what is recorded in the Law on the State Border.

[Zhdankin] The laws were in existence even earlier. Most likely there was some other stimulus to make the law begin to operate in full force.

[Kudinov] Above all it was the support of the commanders by the High Command of the Border Service; after all we are speaking here of protecting state sovereignty.

[Zhdankin] How many times did the border troops use weapons this year?

[Kudinov] To fire for effect, only three times. Blanks to prevent violations of the border and entrance into territorial waters were used more often, of course.

Here it is appropriate to make a digression. After each case where weapons were employed for effect, a wave of puzzled indignation rose in the press, both domestic and foreign: How could they shoot at people over squid and crab? For some reason it is surprisingly easy to forget that borders are one of the main attributes of a state, and a border violation is a crime. And employing weapons for effect is the most extreme measure, one used only after others have been exhausted.

To illustrate, we will tell the story of the apprehension of the Chinese schooner Shou Yu-621, which occurred on 12 September. We must specify that the majority of the poachers are Japanese, but sometimes Chinese, South Koreans, and Taiwanese are caught. At about 1200 a border troop plane detected five schooners poaching five miles off the island of Shikotan in our territorial waters. As is usual in such cases, there were no flags on the ships and the fort numbers were covered with burlap. The border troop ships Sakhalin and 691 headed out to apprehend them. The Sakhalin began to pursue the largest schooner.

After three hours of pursuit, a helicopter was called to help out. Before firing, the helicopter even dropped a marker on a cable in front of the deck house which was impossible not to notice or claim not to notice. Only after that did it fire. A large number of the shells hit the stern; needless to say, no one wanted human casualties. But in rolling seas, firing with "jeweler's" precision

becomes more difficult. A couple of the shells hit the deck house where there were two sailors, while the captain was hiding out in his cabin.

On whose conscience are the lives of these fishermen? The chase lasted almost eight hours, and similar foreign services would have employed weapons much sooner.

[Zhdankin] Did the leaders of the border service or other high offices of ours appeal to the Japanese side so that the number of conflicts and certainly victims could be if not ruled out, at least minimized?

[Kudinov] The border troop command does that kind of work constantly. Through the mass information media and through MID [Ministry of Foreign Affairs] channels, presentations were made to establish working contact with Japan's equivalent service—the Naval Security Administration. Even now there are no regular contacts.

[Zhdankin] I had a chance to go to sea on a border troop ship and board Japanese schooners with an inspection group. The contrast between our border troops and the Japanese fishermen in terms of navigation equipment and communications systems is depressing. They have telephones with a satellite link-up, colored fathometers, navigational computer-plotters, the most detailed computer maps, and many other things. Our border troops, alas... Is it possible this gap will be reduced in the foreseeable future?

[Kudinov] The equipping of border troop ships, and the ships themselves (I mean their construction corresponding to modern requirements), depend on financing. If it is sufficient, then the ships will be modern and equipped utilizing the latest scientific and technological advances.

[Zhdankin] Both in the past and during "Fishing Season," the border troops have brought a considerable amount of capital in the form of fines into the treasury. I have repeatedly heard the opinion that some part should be used for the border troops themselves.

[Kudinov] Our draft law on the economic zone states that 50 percent of the fines should be used for the border troops, for they serve in very difficult conditions. We would hope that the law is adopted in the near future and that it will envision higher fines (they are now negligible) which are commensurate with the damage done by the poachers and the expenditures which the border troops incur.

[Zhdankin] There are fears that the "Fishing Season-94" operation, to put it harshly, is just another campaign.

[Kudinov] Not at all. In 1992-1993 the activism of the border troop ships on duty was minimal. For that reason the operation conducted in part also served to make the border troops start operating on a more planned and effective basis. The operation helped utilize practically all potential: ships, launches, airplanes, helicopters, and coast guard subunits. From now on such operations will be regularly conducted.

Afterword. Less than a week had passed after the talk with the commander when a natural disaster was detected in the South Kurils. An earthquake of unprecedented force occurred; its epicenter was 160 kilometers from the island of Shikotan and caused 3-meter tsunami waves. After the first tremor, the island shook for another week. The border troops suffered along with the civilian population, several military posts on small islands were evacuated, and there were human casualties. On Shikotan, 85 percent of the buildings of the military infrastructure were destroyed: residences, the boiler room, dining hall, bakery, and the diesel station, and it is not known how long communications will be out. Shops and docks were destroyed at the Ostrovnaya Fish Combine. Replacing what was destroyed will require enormous amounts of capital. While the trouble is attracting public attention, promises are being made to allocate the capital. What will in fact happen, time will tell. The border in the area of the South Kurils has again been weakened, by the will of the elements.

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